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(54) Title: SUBSTITUTED POLYCYCLIC ARYL AND HETEROARYL PYRIDINES USEFUL FOR SELECTIVE INHIBITION OF THE COAGULATION CASCADE

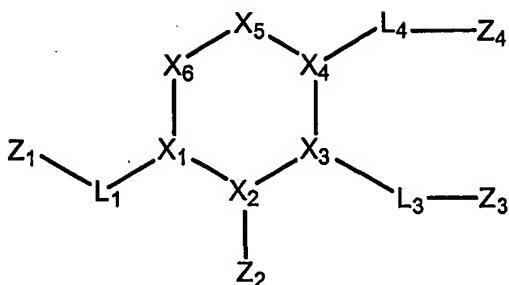
(57) Abstract: The present invention relates to compounds, and prodrugs thereof, composition and methods useful for preventing and treating thrombotic conditions in mammals. The compounds of the present invention, and prodrugs thereof, selectively inhibit certain proteases of the coagulation cascade.

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CLAIMS:

What we claim is:

1. A compound having the structure:



wherein

X₁, X₂, X₃, X₄, X₅, and X₆ are each ring atoms defining a 6 membered heterocyclic or aromatic ring;

10 X₁, X₂, and X₄ are independently carbon or nitrogen; X₃ is carbon;

X₅ and X₆ are independently carbon, nitrogen, oxygen or sulfur, provided at least one of X₁, X₄, and X₆ is other than carbon when X₂ is carbon;

15 L₁, L₃ and L₄ are linkages through which Z₁, Z₃, and Z₄, respectively, are covalently bonded to different ring atoms of the 6 membered heterocyclic or aromatic ring defined by X₁, X₂, X₃, X₄, X₅, and X₆; wherein Z₁ is covalently bonded to X₁, Z₃ is covalently bonded to X₃, and Z₄ is covalently bonded to X₄, each of L₁, L₃ and L₄ independently being a covalent bond or comprising one or more atoms through which Z₁, Z₃, and Z₄ are covalently bonded to X₁, X₃ and X₄, respectively;

20 Z₃ is a substituted hydrocarbyl, or a 5 or 6 membered substituted heterocyclic or aromatic ring, the substituents of the hydrocarbyl or ring comprising an amidine, guanidine, amino, or aminoalkyl group, the ring

atoms of the 5 or 6 membered heterocyclic or aromatic ring of Z_3 , being carbon, sulfur, nitrogen, or oxygen, wherein the 5 or 6 membered ring is optionally substituted at any position with halogen, hydroxy, or alkyl;

5 Z_4 comprises hydrocarbyl, substituted hydrocarbyl or a 5 or 6-membered heterocyclic ring, the ring atoms of the 5 or 6-membered heterocyclic ring being carbon, sulfur, nitrogen or oxygen;

10 Z_1 is hydrogen, hydrocarbyl, or substituted hydrocarbyl; and

Z_2 is a hydrogen bond acceptor covalently or datively bonded to X_2 .

2. The compound of claim 1 wherein

15 Z_3 comprises a 5 or 6 membered heterocyclic or aromatic ring substituted with an amidine group, the ring atoms of the 5 or 6 membered heterocyclic or aromatic ring of Z_3 , being carbon, sulfur, nitrogen, or oxygen, wherein the 5 or 6 membered ring is optionally substituted at any position with halogen, hydroxy, or alkyl;

20 Z_4 comprises a 5 or 6 membered heterocyclic or carboxylic ring, the ring atoms of the 5 or 6 membered heterocyclic or carboxylic ring of Z_4 being carbon, nitrogen, oxygen, or sulfur; and

25 Z_1 is hydrocarbyl or substituted hydrocarbyl.

3. The compound of claim 2 wherein the 5 or 6 membered heterocyclic or carbocyclic ring comprising Z_4 is substituted with two substituents, R_{42} and R_{44} , and two ring atoms each of which is in the beta position relative to the ring atom of Z_4 through which Z_4 is covalently linked to X_4 , wherein one of R_{42} and R_{44} is covalently bonded to one of said beta positions and the other of R_{42} and R_{44} is covalently bonded to the other of said beta

positions.

4. The compound of claim 3 wherein R₄₂ is amino and R₄₄ is hydrogen, hydrocarbyl, substituted hydrocarbyl, heterocyclo, halogen, or a substituted or unsubstituted 5 heteroatom selected from nitrogen, oxygen, sulfur and phosphorous.

5. The compound of claim 2 wherein the 5 or 6 membered heterocyclic or aromatic ring comprising Z₃ is optionally substituted at any position with fluorine, 10 methyl or hydroxy.

6. The compound of each of claims 1, 2 or 3 wherein the 5 or 6 membered heterocyclic or aromatic ring comprising Z₃ is substituted with a derivatived amidine which, upon hydrolysis, oxidation, reduction or 15 elimination yields an amidine group.

7. The compound of claim 1 or 2 wherein L₃ is selected from the group consisting of a glycine derivative, an alanine derivative, an amino derivative, or a sulfonyl derivative.

20 8. The compound of claim 1 or 2 wherein L₁ is covalently bonded directly to X₆ to form a fused ring.

9. The compound of claim 1 or 2 wherein L₁ is -X₉NH- wherein X₉ is covalently bonded directly to Z₁ and X₉ is a direct bond or -(CH₂)_m- wherein m is 1 to 5.

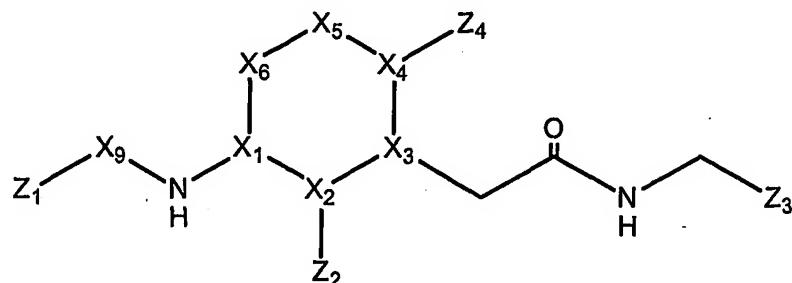
25 10. The compound of each of claims 1, 2 or 3 wherein L₃ is -CH₂CONHCH₂-.

11. The compound of claim 3 wherein R₄₄ is hydrogen, hydrocarbyl, substituted hydrocarbyl, heteroaryl,

heterocyclo, halogen, acetamido, guanidino, hydroxy, nitro, amino, amidosulfonyl, acylamido, hydrocarbyloxy, substituted hydrocarbyloxy, hydrocarbylthio, substituted hydrocarbylthio, hydrocarbysulfonyl, or substituted hydrocarbysulfonyl.

5

12. The compound of claim 2 having the structure:



10

Wherein

Z₁, Z₂, Z₃, X₁, X₂, X₃, X₄, X₅, and X₆ are as defined in claim 2;

X₉ is a direct bond or -(CH₂)_m- where m is 1 or 2; and Z₄ is as defined in claim 3.

15

13. The compound of claim 12 wherein Z₁, Z₂, Z₃, and Z₄ are as defined in claim 6.

20

14. The compound of each of claims 2, 3 or 12 wherein X₂ is carbon and Z₂ is hydrogen, fluorine, oxygen, or sulfur.

15. The compound of each of claims 2, 3 or 12 wherein X₂ is nitrogen and Z₂ is hydrogen, an electron pair, or a hydrogen bond acceptor.

25

16. The compound of each of claims 2, 3 or 12 wherein X₂ is nitrogen and Z₂ is hydrogen or oxygen.

17. The compound of each of claims 2, 3 or 12 wherein X₅ is carbon optionally substituted with a

halogen.

18. The compound of each of claims 2, 3 or 12 wherein Z_3 is $-R_{300}C(=NR_{301})NR_{302}R_{303}$, wherein R_{300} is a 6 membered carbocyclic aromatic ring, R_{301} , R_{302} , R_{303} are independently selected from hydrogen, optionally substituted hydrocarbyl, and optionally substituted hetero atoms selected from the group consisting of halogen, oxygen, nitrogen, phosphorous and sulfur.

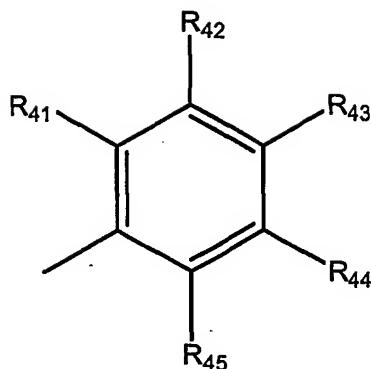
19. The compound of each of claims 2, 3 or 12 wherein Z_3 is $-R_{300}C(=NR_{301})NR_{302}R_{303}$, R_{300} is a 6 membered carbocyclic aromatic ring, and at least two of R_{301} , R_{302} , R_{303} are ring atoms of a heterocyclic ring.

20. The compound of each of claims 2, 3 or 12 wherein Z_3 is $-R_{300}C(=NR_{301})NR_{302}R_{303}$, R_{300} is a 6 membered carbocyclic aromatic ring, and at least one of R_{301} , R_{302} , R_{303} are ring atoms of a heterocyclic ring fused to R_{300} .

21. The compound of claim 20 wherein Z_3 is benzene substituted with a derivatived amidine which, upon hydrolysis, oxidation, reduction or elimination under physiological conditions yields an amidine group.

22. The compound of claim 21 wherein Z_4 is a substituted, 6 member, carbocyclic aromatic ring.

23. The compound of each of claims 2, 3, or 12 wherein Z_4 is



R₄₂ is amino;

R₄₄ is hydrocarbyl, substituted hydrocarbyl, haloen or an optionally substituted hetero atom selected from the group consisting of oxygen, nitrogen, and sulfur; and

5 R₄₁, R₄₃ and R₄₅ are independently hydrogen, and hydrocarbyl, substituted hydrocarbyl, halogen or an optionally substituted hetero atom selected from the group consisting of oxygen, nitrogen, and sulfur.

10 24. The compound of claim 23 wherein R₄₄ is hydrocarbyl, substituted hydrocarbyl, acetamido, alkoxy, hydroxy, amino, alkylsulfonyl, haloalkyl, haloalkoxy, haloalkylthio, carboalkoxy, carboxy, carboxamidoalkyl, or carboxamidoalkylaryl.

15 25. The compound of claim 23 wherein each of R₄₁, R₄₃ and R₄₅ are hydrogen.

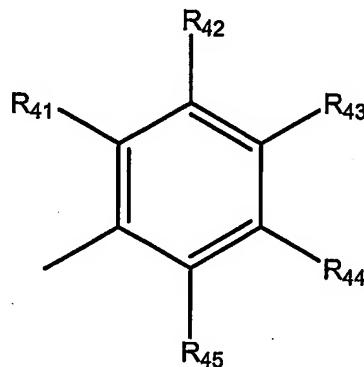
20 26. The compound of claim 12 wherein X, is a direct bond, Z₁ is selected from the group consisting of cyclopropyl, isopropyl, cyclobutyl, isobutyl, sec-butyl, methyl, ethyl, and phenyl, and Z₃ is benzene substituted with an amidine group.

27. The compound of claim 12 wherein Z₃ is benzene substituted with a derivatized amidine which, upon

hydrolysis, oxidation, reduction or elimination under physiological conditions yields an amidine group.

28. The compound of claim 12 wherein X₉ is a direct bond, Z₄ is a substituted, 6 member, carbocyclic aromatic ring, Z₃ is benzene substituted with a derivatized amidine which, upon hydrolysis, oxidation, reduction or elimination under physiological conditions yields an amidine group, and Z₁ is selected from the group consisting of cyclopropyl, isopropyl, methyl, ethyl, cyclobutyl, isobutyl, sec-butyl, and phenyl.

10 29. The compound of claim 12 or 28 wherein X₉ is a direct bond, Z₁ is isopropyl, Z₃ is benzene substituted with a derivatized amidine which, upon hydrolysis, oxidation, reduction or elimination under physiological 15 conditions yields an amidine group, and Z₄ is



R₄₂ is amino;

R₄₄ is hydrocarbyl, substituted hydrocarbyl, halogen or an optionally substituted hetero atom selected from the group consisting of oxygen, nitrogen, and sulfur; and

20 R₄₁, R₄₃ and R₄₅ are independently hydrogen, hydrocarbyl, substituted hydrocarbyl, halogen or an optionally substituted hetero atom selected from the group consisting of oxygen, nitrogen, and sulfur.

30. The compound of claim 29 wherein R₄₄ is selected

from the group consisting of hydroxy, alkylsulfonyl, haloalkyl, haloalkoxy, haloalkylthio, carboxamidoalkyl, and carboxamidoalkylaryl.

5 31. The compound of claim 29 wherein R₄₄ is hydrocarbyl, substituted hydrocarbyl, acetamido, alkoxy, hydroxy, amino, alkylsulfonyl, haloalkyl, haloalkoxy, haloalkylthio, carboalkoxy, carboxy, carboxamidoalkyl, or carboxamidoalkylaryl.

10 32. The compound of claim 29 wherein each of R₄₁, R₄₃ and R₄₅ is hydrogen.

15 33. The compound of each of claims 2, 3, or 12 wherein Z₃ comprises a 5 or 6 membered heterocycle or aromatic ring substituted with a derivatized amidine which, upon hydrolysis under physiological conditions, yields an amidine group, the amidine being derivatized with one or more groups selected from carbonyl, thiocarbonyl, imino, enamino, phosphorus, and sulfur.

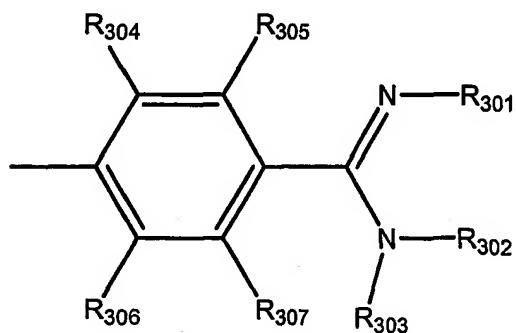
20 34. The compound of each of claims 2, 3, or 12 wherein Z₃ comprises a 5 or 6 membered heterocycle or aromatic ring substituted with a derivatized amidine which, upon oxidation under physiological conditions yields an amidine group, the amidine being derivatized with one or more groups selected from the groups consisting of (i) optionally substituted hydrocarbyl provided that the carbon atom directly bonded to the amidine is sp³ hybridized, and (ii) aryl.

25 35. The compound of each of claims 2, 3, or 12 wherein Z₃ comprises a 5 or 6 membered heterocycle or aromatic ring substituted with a derivatized amidine which, upon reduction under physiological conditions yields an amidine group, the amidine being derivatized

with one or more hetero atoms selected from the group consisting of oxygen, nitrogen in its most reduced state, and sulfur in its most reduced state.

36. The compound of each of claims 2, 3, or 12
 5 wherein Z_3 comprises a 5 or 6 membered heterocycle or aromatic ring substituted with a derivatized amidine which, upon elimination under physiological conditions yields an amidine group, the amidine being derivatized with one or more groups selected from the groups
 10 consisting of a hydrocarbyl substituted at the beta carbon with carbonyl, sulfonyl, sulfinyl, cyano and nitro or an alkyl group substituted with oxygen, nitrogen, or sulfur at the carbon directly bonded to the amidine group.

15 37. The compound of claim 33 wherein Z_3 is a benzamidine derivative which hydrolyzes under physiological conditions to form benzamidine, the benzamidine derivative having the formula



20 R_{301} , R_{302} , and R_{303} are independently selected from the group consisting of hydrogen, $C(=O)R$, $S(=O)OR$, $S(=O)SR$, $S(=O)_2OR$, $S(=O)_2SR$ and alkenyl, provided that the carbon atom directly bonded to the amidine is sp^2 hybridized,
 provided, however, at least one of R_{301} , R_{302} , and R_{303} is other than hydrogen;

25 R is hydrocarbyl, substituted hydrocarbyl, or heterocycle;

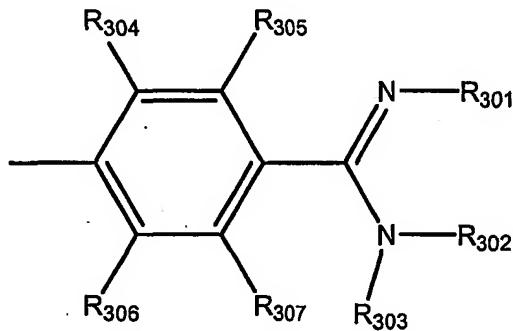
R_{304} is halogen, hydrogen, hydroxyl, sulfhydryl, alkoxy, and alkylthio;

R_{305} is oxygen, sulfur, halogen, hydrogen, hydroxyl, sulfhydryl, alkoxy, and alkylthio;

5 R_{306} is halogen, hydrogen, hydroxyl, sulfhydryl, alkoxy, and alkylthio; and

10 R_{307} is oxygen, sulfur, halogen, hydrogen, hydroxyl, sulfhydryl, alkoxy, and alkylthio.

38. The compound of claim 34 wherein Z_3 is a benzamidine derivative which oxidizes under physiological conditions to form benzamidine, the benzamidine derivative having the formula



15 R_{301} , R_{302} , and R_{303} are independently selected from the group consisting of hydrogen, optionally substituted hydrocarbyl and aryl, provided, however, (i) at least one of R_{301} , R_{302} , and R_{303} is other than hydrogen and (ii) the carbon atom directly bonded to the amidine is sp^3 hybridized when R_{301} , R_{302} , and R_{303} is optionally substituted hydrocarbyl;

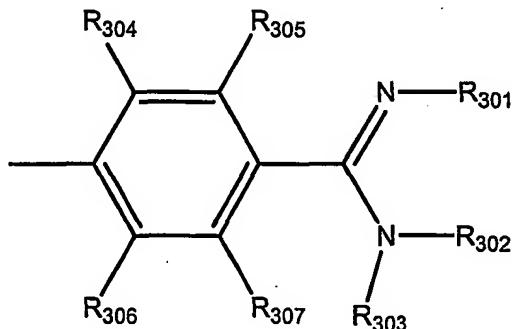
20 R_{304} is halogen, hydrogen, hydroxyl, sulfhydryl, alkoxy, and alkylthio;

R_{305} is oxygen, sulfur, halogen, hydrogen, hydroxyl, sulfhydryl, alkoxy, and alkylthio;

25 R_{306} is halogen, hydrogen, hydroxyl, sulfhydryl, alkoxy, and alkylthio; and

R_{307} is oxygen, sulfur, halogen, hydrogen, hydroxyl, sulfhydryl, alkoxy, and alkylthio.

39. The compound of claim 35 wherein Z_3 is a benzamidine derivative which is reduced under physiological conditions to form benzamidine, the benzamidine derivative having the formula



5 R_{301} , R_{302} , and R_{303} are independently hydrogen, -OR, -SR, -NR, or $-N(R)_2$, wherein each R is independently optionally substituted hydrocarbyl, or heterocylo, provided, however, at least one of R_{301} , R_{302} , and R_{303} is other than hydrogen;

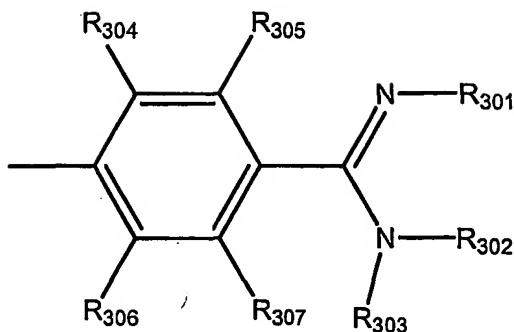
10 R_{304} is halogen, hydrogen, hydroxyl, sulfhydryl, alkoxy, and alkylthio;

R_{305} is oxygen, sulfur, halogen, hydrogen, hydroxyl, sulfhydryl, alkoxy, and alkylthio;

15 R_{306} is halogen, hydrogen, hydroxyl, sulfhydryl, alkoxy, and alkylthio; and

R_{307} is oxygen, sulfur, halogen, hydrogen, hydroxyl, sulfhydryl, alkoxy, and alkylthio.

20 40. The compound of claim 36 wherein Z_3 is a benzamidine derivative which undergoes an elimination reaction under physiological conditions to form benzamidine, the benzamidine derivative having the formula



R₃₀₁, R₃₀₂, and R₃₀₃ are independently (i) hydrogen, (ii) substituted hydrocarbyl wherein the carbon bonded to the amidine group is substituted with -OR_a, -SR_a, -NR_a, or -N(R_a)₂, wherein each R_a is independently -C(O)R_b, -C(O)NR_b, -C(O)N(R_b)₂ and each R_b is independently hydrocarbyl, substituted hydrocarbyl or heterocyclo, (iii) substituted alkyl with the carbon atom beta to the point of attachment to the amidine group being an unsaturated electron withdrawing group, provided, at least one of R₃₀₁, R₃₀₂, and R₃₀₃ is other than hydrogen;

5 R₃₀₄ is halogen, hydrogen, hydroxyl, sulfhydryl, alkoxy, and alkylthio;

R₃₀₅ is oxygen, sulfur, halogen, hydrogen, hydroxyl, sulfhydryl, alkoxy, and alkylthio;

10 R₃₀₆ is halogen, hydrogen, hydroxyl, sulfhydryl, alkoxy, and alkylthio; and

R₃₀₇ is oxygen, sulfur, halogen, hydrogen, hydroxyl, sulfhydryl, alkoxy, and alkylthio.

15 41. The compound of claim 37 wherein R₃₀₁ and R₃₀₅ together with the benzene ring of which R₃₀₅ is a substituent form a fused ring.

20 42. The compound of claim 38 wherein R₃₀₁ and R₃₀₅ together with the benzene ring of which R₃₀₅ is a substituent form a fused ring.

43. The compound of claim 39 wherein R_{301} and R_{305} together with the benzene ring of which R_{305} is a substituent form a fused ring.

5 44. The compound of claim 40 wherein R_{301} and R_{305} together with the benzene ring of which R_{305} is a substituent form a fused ring.

10 45. The compound of claim 41 wherein R_{301} and one of R_{302} and R_{303} together with the nitrogen atoms to which they are bonded form a 5 or 6 membered heterocyclic ring.

46. The compound of claim 45 wherein the ring atoms are selected from carbon, nitrogen and oxygen.

15 47. The compound of claim 37 wherein the derivatized amidine upon oxidation, reduction or elimination under physiological conditions yields an amidine group.

20 48. The compound of claim 38 wherein the derivatized amidine upon hydrolysis, reduction or elimination under physiological conditions yields an amidine group.

49. The compound of claim 39 wherein the derivatized amidine upon hydrolysis, oxidation, or elimination under physiological conditions yields an amidine group.

25 50. The compound of claim 40 wherein the derivatized amidine upon hydrolysis, oxidation, or reduction under physiological conditions yields an amidine group.

51. The compound of each of claims 1-3 or 12
wherein X_1 is carbon.

52. The compound of each of claims 1-3 or 12
wherein X_1 is nitrogen.

5 53. The compound of each of claims 1-3 or 12
wherein X_2 is carbon.

54. The compound of each of claims 1-3 or 12
wherein X_2 is nitrogen.

10 55. The compound of each of claims 1-3 or 12
wherein X_3 is carbon.

56. The compound of each of claims 1-3 or 12
wherein X_4 is carbon.

57. The compound of each of claims 1-3 or 12
wherein X_4 is nitrogen.

15 58. The compound of each of claims 1-3 or 12
wherein X_5 is carbon.

59. The compound of each of claims 1-3 or 12
wherein X_5 is nitrogen.

20 60. The compound of each of claims 1-3 or 12
wherein X_5 is oxygen.

61. The compound of each of claims 1-3 or 12
wherein X_5 is sulfur.

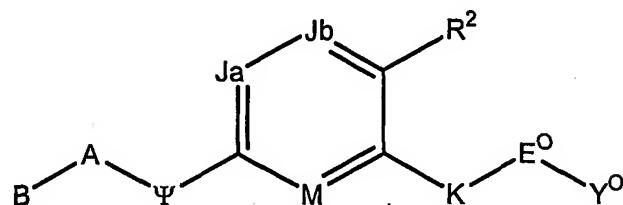
62. The compound of each of claims 1-3 or 12
wherein X_6 is carbon.

63. The compound of each of claims 1-3 or 12
wherein X_6 is nitrogen.

64. The compound of each of claims 1-3 or 12
wherein X_6 is oxygen.

5 65. The compound of each of claims 1-3 or 12
wherein X_6 is sulfur.

66. The compound of claim 1 having the structure:



or a pharmaceutically acceptable salt thereof, wherein;

10 M is N or $N \rightarrow O$;

B is selected from the group consisting of:

(i) phenyl or a heteroaryl of 5 or 6 ring members,
wherein a nitrogen with a removable hydrogen or a carbon
adjacent to the carbon at the point of attachment of said
phenyl or heteroaryl ring to A is optionally substituted
15 by R^{32} , a nitrogen with a removable hydrogen or a carbon
at the other position adjacent to the point of attachment
is optionally substituted by R^{36} , a nitrogen with a
removable hydrogen or a carbon adjacent to R^{32} and two
atoms from the point of attachment is optionally
20 substituted by R^{33} , a nitrogen with a removable hydrogen
or a carbon adjacent to R^{36} and two atoms from the point of
attachment is optionally substituted by R^{35} , and a
nitrogen with a removable hydrogen or a carbon adjacent
25 to both R^{33} and R^{35} is optionally substituted by R^{34} ;
(ii) hydrido, trialkylsilyl, C₂-C₈ alkyl, C₃-C₈
alkylenyl, C₃-C₈ alkenyl, C₃-C₈ alkynyl, and C₂-C₈
haloalkyl, wherein each member of group B is optionally

substituted at any carbon up to and including 6 atoms from the point of attachment of B to A with one or more of the group consisting of R³², R³³, R³⁴, R³⁵, and R³⁶; and

(iii) C3-C12 cycloalkyl or C4-C9 saturated

5 heterocyclyl, wherein each ring carbon is optionally substituted with R³³, a ring carbon other than the ring carbon at the point of attachment of B to A is optionally substituted with oxo provided that no more than one ring carbon is substituted by oxo at the same time, ring

10 carbons and a nitrogen adjacent to the carbon atom at the point of attachment are optionally substituted with R⁹ or R¹³, a ring carbon or nitrogen atom adjacent to the R⁹ position and two atoms from the point of attachment is optionally substituted with R¹⁰, a ring carbon or nitrogen

15 adjacent to the R¹³ position and two atoms from the point of attachment is optionally substituted with R¹², a ring carbon or nitrogen three atoms from the point of attachment and adjacent to the R¹⁰ position is optionally substituted with R¹¹, a ring carbon or nitrogen three

20 atoms from the point of attachment and adjacent to the R¹² position is optionally substituted with R³³, and a ring carbon or nitrogen four atoms from the point of attachment and adjacent to the R¹¹ and R³³ positions is optionally substituted with R³⁴;

25 R⁹, R¹⁰, R¹¹, R¹², and R¹³ are independently selected from the group consisting of hydrido, acetamido, haloacetamido, amidino, guanidino, alkylenedioxy, haloalkylthio, alkanoyloxy, alkoxy, cycloalkoxy, cycloalkylalkoxy, aralkoxy, aryloxy, heteroaryloxy, heteroaralkoxy, heterocyclyloxy, heterocyclalkoxy, alkoxyalkyl, haloalkoxylalkyl, hydroxy, amino, alkoxyamino, nitro, alkylamino, N-alkyl-N-arylarnino, arylamino, aralkylamino, heteroarylarnino, heteroaralkylarnino, heterocyclarnino, heterocyclalkylarnino, alkylthio, alkylthioalkyl, alkylsulfinyl, arylsulfinyl, aralkylsulfinyl,

cycloalkylsulfinyl, heteroarylsulfinyl, alkylsulfonyl,
arylsulfonyl, aralkylsulfonyl, cycloalkylsulfonyl,
heteroarylsulfonyl, alkylsulfonylalkyl, aryl, aralkyl,
cycloalkyl, cycloalkylalkyl, heteroaryl, heterocyclyl,
5 alkylsulfonamido, amidosulfonyl, alkanoyl, haloalkanoyl,
alkyl, alkenyl, halo, haloalkyl, haloalkenyl, haloalkoxy,
hydroxyhaloalkyl, hydroxyalkyl, aminoalkyl,
haloalkoxyalkyl, carboxyalkyl, carboalkoxy, carboxy,
carboxamido, carboxamidoalkyl, and cyano;

10 R^{32} , R^{33} , R^{34} , R^{35} , and R^{36} are selected from the group
consisting of:

(i) hydrido, acetamido, haloacetamido, amidino,
guanidino, alkylenedioxy, haloalkylthio, alkanoyloxy,
15 alkoxy, cycloalkoxy, cycloalkylalkoxy, aralkoxy, aryloxy,
heteroaryloxy, heteroaralkoxy, heterocyclxy, heterocyclalkoxy,
hydroxy, amino, alkoxyamino, nitro, alkylamino, N-alkyl-
N-arylarnino, arylarnino, aralkylarnino, heteroarylarnino,
heteroaralkylarnino, heterocyclylarnino,
20 heterocyclalkylarnino, alkylthio, alkylthioalkyl,
alkylsulfinyl, arylsulfinyl, aralkylsulfinyl,
cycloalkylsulfinyl, heteroarylsulfinyl, alkylsulfonyl,
arylsulfonyl, aralkylsulfonyl, cycloalkylsulfonyl,
heteroarylsulfonyl, alkylsulfonylalkyl, aryl, aralkyl,
25 cycloalkyl, cycloalkylalkyl, heteroaryl, heterocyclyl,
alkylsulfonamido, amidosulfonyl, alkanoyl, haloalkanoyl,
alkyl, alkenyl, halo, haloalkyl, haloalkenyl, haloalkoxy,
hydroxyhaloalkyl, hydroxyalkyl, aminoalkyl,
haloalkoxyalkyl, carboxyalkyl, carboalkoxy, carboxy,
30 carboxamido, carboxamidoalkyl, and cyano; and

(ii) Q^b;

A is selected from the group consisting of a bond,
 $(W^7)_{rr}-(CH(R^{15}))_{pa}$, and $(CH(R^{15}))_{pa}-(W^7)_{rr}$ wherein rr is 0
or 1, pa is an integer selected from 0 through 6, and W⁷
35 is selected from the group consisting of O, S, C(O),
 $(R^7)NC(O)$, $(R^7)NC(S)$, and $N(R^7)$ with the proviso that no

more than one of the group consisting of rr and pa is 0 at the same time;

R⁷ is selected from the group consisting of hydrido, hydroxy, and alkyl;

5 R¹⁵ is selected from the group consisting of hydrido, hydroxy, halo, alkyl, and haloalkyl;

Ψ is NH or NOH;

Ja is N or C-X⁰;

Jb is N or C-R¹;

10 X⁰ is selected from the group consisting of:

(i) hydrido, alkyl, alkenyl, cyano, halo, haloalkyl, haloalkoxy, haloalkylthio, amino, aminoalkyl, alkylamino, amidino, hydroxy, hydroxyamino, alkoxy, hydroxyalkyl, alkoxyamino, thiol, and alkylthio;

15 R¹ is selected from the group consisting of:

(i) hydrido, alkyl, alkenyl, cyano, halo, haloalkyl, haloalkoxy, haloalkylthio, amino, aminoalkyl, alkylamino, amidino, hydroxy, hydroxyamino, alkoxy, hydroxyalkyl, alkoxyamino, thiol, and alkylthio;

20 (ii) taken with X⁰ or R² to form -W=X-Y=Z-; wherein -W=X-Y=Z- forms an aryl or C5-C6 heteroaryl; and

(iii) taken with X⁰ or R² bonded together to form C5-C8 cycloalkenyl ring or a partially saturated C5-C8 heterocyclyl ring, wherein said cycloalkenyl ring or heterocyclyl ring is optionally substituted with one or more of the group consisting of R⁹, R¹⁰, R¹¹, R¹², and R¹³;

25 W, X, Y, and Z are independently selected from the group consisting of C(R⁹), C(R¹⁰), C(R¹¹), C(R¹²), N, N(R¹⁰), O, S, and a bond with the proviso that one of W, X, Y, and Z is independently selected to be a bond when one of W, X, Y, and Z is O or S, with the further proviso that no more than one of W, X, Y, and Z is optionally O or S, and with the additional proviso that no more than three of W, X, Y, and Z are optionally N or N(R¹⁰);

30 R² is Z⁰-Q;

35 Z⁰ is selected from the group consisting of:

(i) a bond, $(CR^{41}R^{42})_q$ wherein q is an integer selected from 1 through 3, and $(CH(R^{41}))_g-W^0-(CH(R^{42}))_p$ wherein g and p are integers independently selected from 0 through 3 and W^0 is selected from the group consisting of O, S, C(O), S(O), N(R^{41}), and ON(R^{41}); and

(ii) $(CH(R^{41}))_e-W^{22}-(CH(R^{42}))_h$ wherein e and h are independently 0 or 1 and W^{22} is selected from the group consisting of $CR^{41}=CR^{42}$, 1,2-cyclopropyl, 1,2-cyclobutyl, 1,2-cyclohexyl, 1,3-cyclohexyl, 1,2-cyclopentyl, 1,3-cyclopentyl, 2,3-morpholinyl, 2,4-morpholinyl, 2,6-morpholinyl, 3,4-morpholinyl, 3,5-morpholinyl, 1,2-piperazinyl, 1,3-piperazinyl, 2,3-piperazinyl, 2,6-piperazinyl, 1,2-piperidinyl, 1,3-piperidinyl, 2,3-piperidinyl, 2,4-piperidinyl, 2,6-piperidinyl, 3,4-piperidinyl, 1,2-pyrrolidinyl, 1,3-pyrrolidinyl, 2,3-pyrrolidinyl, 2,4-pyrrolidinyl, 2,5-pyrrolidinyl, 3,4-pyrrolidinyl, 2,3-tetrahydrofuranyl, 2,4-tetrahydrofuranyl, 2,5-tetrahydrofuranyl, and 3,4-tetrahydrofuranyl, wherein Z^0 is directly bonded to the pyridine ring and W^{22} is optionally substituted with one or more substituents selected from the group consisting of R^9 , R^{10} , R^{11} , R^{12} , and R^{13} ;

R^{41} and R^{42} are independently selected from the group consisting of amidino, hydroxyamino, hydrido, hydroxy, amino, and alkyl;

Q is selected from the group consisting of:

(i) phenyl or a heteroaryl of 5 or 6 ring members, wherein a nitrogen with a removable hydrogen or a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to Z^0 is optionally substituted by R^9 , a nitrogen with a removable hydrogen or a carbon at the other position adjacent to the point of attachment is optionally substituted by R^{13} , a nitrogen with a removable hydrogen or a carbon adjacent to R^9 and two atoms from the point of attachment is optionally substituted by R^{10} , a nitrogen with a removable hydrogen or a carbon adjacent

to R¹³ and two atoms from the point of attachment is optionally substituted by R¹², and a nitrogen with a removable hydrogen or a carbon adjacent to both R¹⁰ and R¹² is optionally substituted by R¹¹; and

5 (ii) hydrido with the proviso that Z⁰ is selected from other than a bond;

K is selected from the group consisting of:

(i) CR^{4a}R^{4b}; and

10 (ii) (CH(R¹⁴))_j-T wherein j is 0 or 1 and T is a bond or N(R⁷) with the proviso that (CH(R¹⁴))_j is bonded to the phenyl ring;

R^{4a} and R^{4b} are independently selected from the group consisting of halo, hydrido, hydroxyalkyl, alkyl, alkoxyalkyl, alkylthioalkyl, and haloalkyl;

15 E⁰ is selected from the group consisting of:

(i) E¹, with the proviso that K is CR^{4a}R^{4b}, wherein E¹ is selected from the group consisting of a covalent single bond, C(O)N(H), (H)NC(O), C(S)N(H), (H)NC(S), S(O)₂N(H), N(H)S(O)₂, S(O)₂N(H)C(O), and C(O)N(H)S(O)₂; and

20 (ii) E², with the proviso that K is (CH(R¹⁴))_j-T, wherein E² is selected from the group consisting of C(O)N(H), (H)NC(O), C(S)N(H), (H)NC(S), S(O)₂N(H), N(H)S(O)₂, S(O)₂N(H)C(O), and C(O)N(H)S(O)₂;

25 R¹⁴ is selected from the group consisting of hydrido, halo, alkyl, and haloalkyl;

Y⁰ is selected from the group consisting of:

(i) phenyl or a heteroaryl of 5 or 6 ring members, wherein one carbon of said phenyl or said heteroaryl is substituted by Q^a, a carbon two or three contiguous atoms from the point of attachment of Q^a to said phenyl or said heteroaryl to said phenyl or said heteroaryl is substituted by Q^b, a carbon adjacent to the point of attachment of Q^a is optionally substituted by R¹⁷, another carbon adjacent to the point of attachment of Q^a is optionally substituted by R¹⁸, a carbon adjacent to Q^b is optionally substituted by R¹⁶, and another carbon adjacent

to Q^b is optionally substituted by R¹⁹;

(ii) Y^{AT} wherein Y^{AT} is Q^b-Q^a; and

(iii) Q^b-Q^{ss} wherein Q^{ss} is (CH(R¹⁴))_e-W²-(CH(R¹⁵))_h,
wherein e and h are independently 1 or 2 and W² is
CR^{4a}=CR^{4b}, with the proviso that (CH(R¹⁴))_e is bonded to E⁰;

R¹⁷ and R¹⁹ are independently selected from the group
consisting of hydrido, amidino, guanidino, carboxy,
haloalkylthio, alkoxy, hydroxy, amino, nitro,
alkoxyamino, alkylamino, alkylthio, alkylsulfinyl,
alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, alkenyl,
halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl,
haloalkoxyalkyl, carboalkoxy, and cyano;

R¹⁶ and R¹⁹ are independently selected from the group
consisting of:

(i) hydrido, amidino, guanidino, carboxy,
haloalkylthio, alkoxy, hydroxy, amino, nitro,
alkoxyamino, alkylamino, alkylthio, alkylsulfinyl,
alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, alkenyl,
halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl,
haloalkoxyalkyl, carboalkoxy, and cyano;

(ii) NR²⁰R²¹, N(R²⁶)C(NR²⁵)N(R²³)(R²⁴), and C(NR²⁵)NR²³R²⁴,
with the proviso that R¹⁶, R¹⁹, and Q^b are not
simultaneously hydrido;

Q^b is selected from the group consisting of NR²⁰R²¹,
aminoalkyl, hydrido, N(R²⁶)C(NR²⁵)N(R²³)(R²⁴), and
C(NR²⁵)NR²³R²⁴, with the proviso that no more than one of R²⁰
and R²¹ is selected from the group consisting of hydroxy,
amino, alkylamino, and dialkylamino at the same time,
with the further proviso that no more than one of R²³ and
R²⁴ is selected from the group consisting of hydroxy,
amino, alkylamino, and dialkylamino at the same time;

R²⁰, R²¹, R²³, R²⁴, R²⁵, and R²⁶ are independently
selected from the group consisting of hydrido, alkyl,
hydroxy, aminoalkyl, amino, dialkylamino, alkylamino,
and hydroxyalkyl;

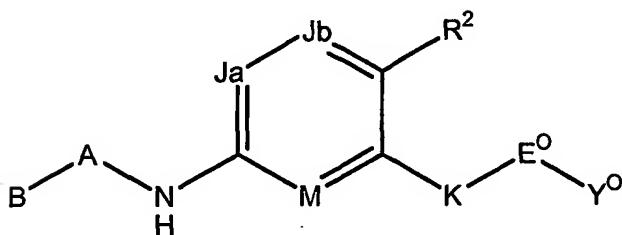
Q^a is selected from the group consisting of a bond,

(CR³⁷R³⁸)_b, wherein b is an integer selected from 1 through 4, and (CH(R¹⁴))_c-W¹-(CH(R¹⁵))_d wherein c and d are integers independently selected from 1 through 3 and W¹ is selected from the group consisting of C(O)N(R¹⁴), (R¹⁴)NC(O), S(O), 5 S(O)₂, S(O)₂N(R¹⁴), N(R¹⁴)S(O)₂, and N(R¹⁴), with the proviso that R¹⁴ is selected from other than halo when directly bonded to N, and with the additional proviso that (CR³⁷R³⁸)_b and (CH(R¹⁴))_c are bonded to E⁰;

10 R³⁷ is independently selected from the group consisting of hydrido, alkyl, and haloalkyl;

R³⁸ is selected from the group consisting of hydrido, alkyl, haloalkyl, aroyl or heteroaroyl, wherein R³⁸ is optionally substituted with one or more substituents selected from the group consisting of R¹⁶, R¹⁷, R¹⁸, and R¹⁹.

15 67. The compound of claim 66 having the structure:



or a pharmaceutically acceptable salt thereof, wherein;

M is N or N→O;

B is selected from the group consisting of:

(i) phenyl or a heteroaryl of 5 or 6 ring members, wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to A is optionally substituted by R³², the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R³⁶, a carbon adjacent to R³² and two atoms from the carbon at the point of attachment is optionally substituted by R³³, a carbon adjacent to R³⁶ and two atoms from the carbon at the point of attachment is optionally substituted by R³⁵, and any carbon adjacent to both R³³ and R³⁵ is optionally substituted by R³⁴;

(ii) hydrido, trialkylsilyl, C₂-C₈ alkyl, C₃-C₈ alkylenyl, C₃-C₈ alkenyl, C₃-C₈ alkynyl, and C₂-C₈ haloalkyl, wherein each member of group B is optionally substituted at any carbon up to and including 6 atoms from the point of attachment of B to A with one or more of the group consisting of R³², R³³, R³⁴, R³⁵, and R³⁶; and

(iii) C₃-C₁₂ cycloalkyl or a C₄-C₉ saturated heterocyclyl, wherein each ring carbon is optionally substituted with R³³, a ring carbon other than the ring carbon at the point of attachment of B to A is optionally substituted with oxo provided that no more than one ring carbon is substituted by oxo at the same time, ring carbons and a nitrogen adjacent to the carbon atom at the point of attachment are optionally substituted with R⁹ or R¹³, a ring carbon or nitrogen atom adjacent to the R⁹ position and two atoms from the point of attachment is optionally substituted with R¹⁰, a ring carbon or nitrogen atom adjacent to the R¹³ position and two atoms from the point of attachment is optionally substituted with R¹², a ring carbon or nitrogen atom three atoms from the point of attachment and adjacent to the R¹⁰ position is optionally substituted with R¹¹, a ring carbon or nitrogen atom three atoms from the point of attachment and adjacent to the R¹² position is optionally substituted with R³³, and a ring carbon or nitrogen atom four atoms from the point of attachment and adjacent to the R¹¹ and R³³ positions is optionally substituted with R³⁴;

R⁹, R¹⁰, R¹¹, R¹², and R¹³ are independently selected from the group consisting of hydrido, acetamido, haloacetamido, alkoxyamino, alkanoyl, haloalkanoyl, amidino, guanidino, alkylenedioxy, haloalkylthio, alkoxy, cycloalkoxy, cycloalkylalkoxy, aralkoxy, aryloxy, heteroaryloxy, heteroaralkoxy, heterocyclxyloxy, heterocyclylalkoxy, hydroxy, amino, alkylamino, N-alkyl-N-arylarnino, arylarnino, aralkylarnino, heteroarylarnino, heteroaralkylarnino, heterocyclylarnino,

heterocyclalkylamino, alkylthio, alkylsulfinyl,
arylsulfinyl, aralkylsulfinyl, cycloalkylsulfinyl,
heteroarylsulfinyl, alkylsulfamido, alkylsulfonyl,
arylsulfonyl, aralkylsulfonyl, cycloalkylsulfonyl,
5 heteroarylsulfonyl, amidosulfonyl, alkyl, aryl, aralkyl,
cycloalkyl, cycloalkylalkyl, heteroaryl, heterocyclyl,
halo, haloalkyl, haloalkoxy, hydroxyalkyl,
hydroxyhaloalkyl, aminoalkyl, carboalkoxy, carboxy,
carboxyalkyl, carboxamido, and cyano;

10 A is bond or $(CH(R^{15}))_{pa}-(W^7)_{rr}$ wherein rr is 0 or 1,
pa is an integer selected from 0 through 3, and W⁷ is
selected from the group consisting of O, S, C(O),
(R⁷)NC(O), (R⁷)NC(S), and N(R⁷), with the proviso that W⁷
is bonded to the N(H) on the pyridine ring;

15 R⁷ is selected from the group consisting of hydrido,
hydroxy and alkyl;

R¹⁵ is selected from the group consisting of hydrido,
hydroxy, halo, alkyl, and haloalkyl;

Ja is N or C-X⁰;

20 Jb is N or C-R¹;

X⁰ is independently selected from the group
consisting of hydrido, alkyl, cyano, halo, haloalkyl,
haloalkoxy, amino, aminoalkyl, alkylamino, amidino,
hydroxy, hydroxyamino, alkoxy, hydroxyalkyl, alkoxyamino,
25 thiol, and alkylthio;

R¹ is selected from the group consisting of:

30 (i) hydrido, alkyl, cyano, halo, haloalkyl,
haloalkoxy, amino, aminoalkyl, alkylamino, amidino,
hydroxy, hydroxyamino, alkoxy, hydroxyalkyl, alkoxyamino,
thiol, and alkylthio;

(ii) taken with X⁰ or R² to form -W=X-Y=Z-; wherein
-W=X-Y=Z- forms an aryl or heteroaryl of 5 or 6 ring-
members; and

35 (iii) taken with X⁰ or R² bonded together to form C5-
C8 cycloalkenyl ring or a partially saturated C5-C8
heterocyclyl ring, wherein said cycloalkenyl ring or

heterocyclyl ring is optionally substituted with one or more of the group consisting of R⁹, R¹⁰, R¹¹, R¹², and R¹³;

W, X, Y, and Z are independently selected from the group consisting of C(R⁹), C(R¹⁰), C(R¹¹), C(R¹²), N, N(R¹⁰), O, S and a bond with the proviso that one of W, X, Y, and Z is independently selected to be a bond when one of W, X, Y, and Z is O or S, with the further proviso that no more than one of W, X, Y, and Z is optionally selected from the group consisting of O and S, and with the additional proviso that no more than three of W, X, Y, and Z are optionally N or N(R¹⁰) ;

R² is Z⁰-Q;

Z⁰ is selected from the group consisting of:

(i) a bond, (CR⁴¹R⁴²)_q wherein q is 1 or 2, and (CH(R⁴¹))_g-W⁰-(CH(R⁴²))_p wherein g and p are integers independently selected from 0 through 3 and W⁰ is selected from the group consisting of O, S, C(O), S(O), N(R⁴¹), and ON(R⁴¹) ; and

(ii) (CH(R⁴¹))_e-W²²-(CH(R⁴²))_h wherein e and h are independently 0 or 1 and W²² is selected from the group consisting of CR⁴¹=CR⁴², 1,2-cyclopropyl, 1,2-cyclobutyl, 1,2-cyclohexyl, 1,3-cyclohexyl, 1,2-cyclopentyl, 1,3-cyclopentyl, 2,3-morpholinyl, 2,4-morpholinyl, 2,6-morpholinyl, 3,4-morpholinyl, 3,5-morpholinyl, 1,2-piperazinyl, 1,3-piperazinyl, 2,3-piperazinyl, 1,2-piperidinyl, 1,3-piperidinyl, 2,3-piperidinyl, 2,4-piperidinyl, 2,6-piperidinyl, 3,4-piperidinyl, 1,2-pyrrolidinyl, 1,3-pyrrolidinyl, 2,3-pyrrolidinyl, 2,4-pyrrolidinyl, 2,5-pyrrolidinyl, 3,4-pyrrolidinyl, 2,3-tetrahydrofuranyl, 2,4-tetrahydrofuranyl, 2,5-tetrahydrofuranyl, and 3,4-tetrahydrofuranyl, wherein Z⁰ is directly bonded to the pyridine ring and W²² is optionally substituted with one or more substituents selected from the group consisting of R⁹, R¹⁰, R¹¹, R¹², and R¹³;

R⁴¹ and R⁴² are independently selected from the group

consisting of hydrido, hydroxy, alkyl, and amino;

Q is selected from the group consisting of:

(i) phenyl or a heteroaryl of 5 or 6 ring members, wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to Z⁰ is optionally substituted by R⁹, the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R¹³, a carbon adjacent to R⁹ and two atoms from the carbon at the point of attachment is optionally substituted by R¹⁰, a carbon adjacent to R¹³ and two atoms from the carbon at the point of attachment is optionally substituted by R¹², and any carbon adjacent to both R¹⁰ and R¹² is optionally substituted by R¹¹; and

(ii) hydrido with the proviso that Z⁰ is other than a bond;

K is selected from the group consisting of:

(i) CR^{4a}R^{4b};

(ii) (CH(R¹⁴))_j-T wherein j is 0 or 1 and T is a bond or N(R⁷) with the proviso that (CH(R¹⁴))_j is bonded to the phenyl ring;

R^{4a} and R^{4b} are independently selected from the group consisting of hydrido, hydroxyalkyl, alkyl, alkoxyalkyl, alkylthioalkyl, and haloalkyl;

R¹⁴ is hydrido or halo;

E⁰ is selected from the group consisting of:

(i) E¹, with the proviso that K is CR^{4a}R^{4b}, is E¹ wherein E¹ is selected from the group consisting of a covalent single bond, C(O)N(H), (H)NC(O), S(O)₂N(H), and N(H)S(O)₂; and

(ii) E², with the proviso that K is (CH(R¹⁴))_j-T, is E² wherein E² is selected from the group consisting of C(O)N(H), (H)NC(O), C(S)N(H), (H)NC(S), S(O)₂N(H), N(H)S(O)₂, S(O)₂N(H)C(O), and C(O)N(H)S(O)₂;

Y⁰ is selected from the group consisting of:

(i) phenyl or a heteroaryl of 5 or 6 ring members, wherein one carbon of said phenyl or said heteroaryl is

substituted by Q^a, a carbon two or three atoms from the point of attachment of Q^a to said phenyl or said heteroaryl is substituted by Q^b, a carbon adjacent to the point of attachment of Q^a is optionally substituted by R¹⁷, another carbon adjacent to the point of attachment of Q^a is optionally substituted by R¹⁸, a carbon adjacent to Q^b is optionally substituted by R¹⁶, and another carbon adjacent to Q^b is optionally substituted by R¹⁹;

(ii) Y^{AT} wherein Y^{AT} is Q^b-Q^a; and

(iii) Q^b-Q^{ss} wherein Q^{ss} is (CH(R¹⁴))_e-W²-(CH(R¹⁵))_h, wherein e and h are independently 1 or 2 and W² is CR^{4a}=CR^{4b} with the proviso that (CH(R¹⁴))_e is bonded to E⁰;

R¹⁷ and R¹⁸ are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, haloalkylthio, alkoxy, hydroxy, amino, alkoxyamino, alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano;

R¹⁶ and R¹⁹ are selected from the group consisting of:

(i) hydrido, amidino, guanidino, carboxy, haloalkylthio, alkoxy, hydroxy, amino, alkoxyamino, alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano; and

(ii) NR²⁰R²¹, N(R²⁶)C(NR²⁵)N(R²³)(R²⁴), and C(NR²⁵)NR²³R²⁴, with the proviso that R¹⁶, R¹⁹, and Q^b are not simultaneously hydrido;

Q^b is selected from the group consisting of NR²⁰R²¹, hydrido, N(R²⁶)C(NR²⁵)N(R²³)(R²⁴), and C(NR²⁵)NR²³R²⁴, with the proviso that no more than one of R²⁰ and R²¹ is selected from the group consisting of hydroxy, amino, alkylamino, and dialkylamino at the same time, with the further proviso that no more than one of R²³ and R²⁴ is selected from the group consisting of hydroxy, amino, alkylamino, and dialkylamino at the same time;

R²⁰, R²¹, R²³, R²⁴, R²⁵, and R²⁶ are independently

selected from the group consisting of hydrido, alkyl, hydroxy, amino, alkylamino and dialkylamino;

Q^b is selected from the group consisting of a bond, (CR³⁷R³⁸)_b wherein b is an integer selected from 1 through 4, and (CH(R¹⁴))_c-W¹-(CH(R¹⁵))_d wherein c and d are integers independently selected from 1 through 3 and W¹ is selected from the group consisting of C(O)N(R¹⁴), (R¹⁴)NC(O), S(O), S(O)₂, S(O)₂N(R¹⁴), N(R¹⁴)S(O)₂, and N(R¹⁴), with the proviso that R¹⁴ is selected from other than halo when directly bonded to N, and with the additional proviso that (CR³⁷R³⁸)_b and (CR³⁷R³⁸)_b, and (CH(R¹⁴))_c are bonded to E⁰;

R³⁷ is independently selected from the group consisting of hydrido, alkyl, and haloalkyl;

R³⁸ is selected from the group consisting of hydrido, alkyl, haloalkyl, aroyl or heteroaroyl, wherein R³⁸ is optionally substituted with one or more substituents selected from the group consisting of R¹⁶, R¹⁷, R¹⁸, and R¹⁹.

68. The compound of claim 67 or a pharmaceutically acceptable salt thereof, wherein;

M is N or N→O;

B is selected from the group consisting of hydrido, trialkylsilyl, C₂-C₈ alkyl, C₃-C₈ alkylene, C₃-C₈ alkenyl, C₃-C₈ alkynyl, and C₂-C₈ haloalkyl, wherein each member of group B is optionally substituted at any carbon up to and including 6 atoms from the point of attachment of B to A with one or more of the group consisting of R³², R³³, R³⁴, R³⁵, and R³⁶;

R³², R³³, R³⁴, R³⁵, and R³⁶ are independently selected from the group consisting of hydrido, acetamido, haloacetamido, amidino, guanidino, alkoxy, hydroxy, amino, alkoxyamino, alkylamino, alkylthio, amidosulfonyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, hydroxyhaloalkyl, carboalkoxy, carboxy, carboxamido, cyano, and Q^b;

A is $(CH(R^{15}))_{pa} - W^7$ wherein pa is an integer selected from 0 through 3 and W^7 is selected from the group consisting of O, S, and $N(R^7)$ wherein R^7 is hydrido or alkyl;

5 R^{15} is selected from the group consisting of hydrido, hydroxy, halo, alkyl, and haloalkyl;

Ja is N or C-X⁰;

Jb is N or C-R¹;

10 R^1 and X^0 are independently selected from the group consisting of hydrido, alkyl, cyano, halo, haloalkyl, haloalkoxy, amino, aminoalkyl, alkylamino, amidino, hydroxy, hydroxyamino, alkoxy, hydroxyalkyl, alkoxyamino, thiol, and alkylthio;

R^2 is Z^0-Q ;

15 Z^0 is a bond or $(CR^{41}R^{42})_q$ wherein q is 1 or 2;

R^{41} and R^{42} are independently selected from the group consisting of hydrido, hydroxy, and amino;

20 Q is phenyl or a heteroaryl of 5 or 6 ring members, wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to Z^0 is optionally substituted by R^9 , the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R^{13} , a carbon adjacent to R^9 and two atoms from the carbon at the point of attachment is optionally substituted by R^{10} , a carbon adjacent to R^{13} and two atoms from the carbon at the point of attachment is optionally substituted by R^{12} , and any carbon adjacent to both R^{10} and R^{12} is optionally substituted by R^{11} , with the proviso that Q is other than a phenyl when Z^0 is a bond;

25 R^9 , R^{10} , R^{11} , R^{12} , and R^{13} are independently selected from the group consisting of hydrido, acetamido, haloacetamido, alkoxyamino, alkanoyl, haloalkanoyl, amidino, guanidino, alkylenedioxy, haloalkylthio, alkoxy, cycloalkoxy, cycloalkylalkoxy, aralkoxy, aryloxy, heteroaryloxy, heteroaralkoxy, heterocyclxyloxy, heterocyclalkoxy, hydroxy, amino, alkylamino, N-alkyl-

N-aryl amino, aryl amino, aralkyl amino, heteroaryl amino, heteroaralkyl amino, heterocyclyl amino, heterocyclylalkyl amino, alkylthio, alkylsulfinyl, arylsulfinyl, aralkylsulfinyl, cycloalkylsulfinyl, 5 heteroarylsulfinyl, alkylsulfamido, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, cycloalkylsulfonyl, heteroarylsulfonyl, amidosulfonyl, alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heterocyclyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, 10 hydroxyhaloalkyl, aminoalkyl, carboalkoxy, carboxy, carboxyalkyl, carboxamido, and cyano;

K is CHR^{4a} wherein R^{4a} is selected from the group consisting of hydrido, hydroxyalkyl, alkyl, alkoxyalkyl, alkylthioalkyl, and haloalkyl;

15 E^0 is selected from the group consisting of a bond, $\text{C}(\text{O})\text{N}(\text{H})$, $(\text{H})\text{NC}(\text{O})$, $(\text{R}^7)\text{NS}(\text{O})_2$, and $\text{S}(\text{O})_2\text{N}(\text{R}^7)$;

Y^0 is selected from the group consisting of:

20 (i) phenyl or a heteroaryl of 5 or 6 ring members, wherein one carbon of said phenyl or said heteroaryl is substituted by Q^s , a carbon two or three contiguous atoms from the point of attachment of Q^s to the phenyl or heteroaryl ring is substituted by Q^b , a carbon adjacent to the point of attachment of Q^s is optionally substituted by R^{17} , another carbon adjacent to the point of attachment of Q^s is optionally substituted by R^{18} , a carbon adjacent to Q^b is optionally substituted by R^{16} , and another carbon adjacent to Q^b is optionally substituted by R^{19} ; and

25 (ii) Q^b-Q^{ss} wherein Q^{ss} is $(\text{CH}(\text{R}^{14}))_e-\text{W}^2-(\text{CH}(\text{R}^{15}))_h$, wherein e and h are integers independently selected from 1 through 2 and W^2 is $\text{CR}^{4a}=\text{CH}$ with the proviso that $(\text{CH}(\text{R}^{14}))_e$ is bonded to E^0 ;

30 R^{17} and R^{18} are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, haloalkylthio, alkoxy, hydroxy, amino, alkoxyamino, lower alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl,

haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano;

R¹⁶ and R¹⁹ are selected from the group consisting of:

(i) hydrido, amidino, guanidino, carboxy,

haloalkylthio, alkoxy, hydroxy, amino, alkoxyamino, lower alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano; and

(ii) NR²⁰R²¹, N(R²⁶)C(NR²⁵)N(R²³)(R²⁴), and C(NR²⁵)NR²³R²⁴, with the proviso that R¹⁶, R¹⁹, and Q^b are not simultaneously hydrido;

Q^b is selected from the group consisting of NR²⁰R²¹, hydrido, N(R²⁶)C(NR²⁵)N(R²³)(R²⁴), and C(NR²⁵)NR²³R²⁴, with the proviso that no more than one of R²⁰ and R²¹ is selected from the group consisting of hydroxy, amino, alkylamino, and dialkylamino at the same time and with the further proviso that no more than one of R²³ and R²⁴ is selected from the group consisting of hydroxy, amino, alkylamino, and dialkylamino at the same time;

R²⁰, R²¹, R²³, R²⁴, R²⁵, and R²⁶ are independently selected from the group consisting of hydrido, alkyl, hydroxy, amino, alkylamino and dialkylamino;

Q^s is selected from the group consisting of a bond, (CR³⁷R³⁸)_b wherein b is an integer selected from 1 through 3, and

(CH(R¹⁴))_c-W¹-(CH(R¹⁵))_d wherein c and d are independently 1 or 2 and W¹ is selected from the group consisting of C(O)N(R¹⁴), (R¹⁴)NC(O), S(O), S(O)₂, S(O)₂N(R¹⁴), N(R¹⁴)S(O)₂, and N(R¹⁴), with the proviso that R¹⁴ is selected from other than halo when directly bonded to N and with the further proviso that (CR³⁷R³⁸)_b and (CH(R¹⁴))_c are bonded to E⁰;

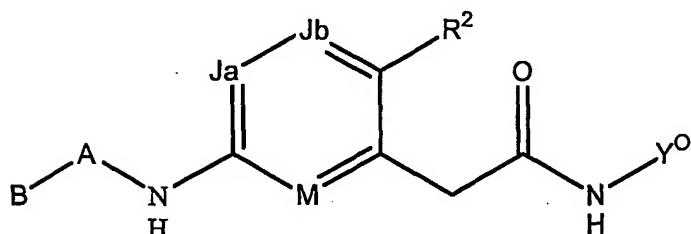
R¹⁴ is selected from the group consisting of hydrido, halo, alkyl, and haloalkyl;

R³⁷ is independently selected from the group consisting of hydrido, alkyl, and haloalkyl;

R³⁸ is selected from the group consisting of hydrido,

alkyl, haloalkyl, aroyl and heteroaroyl.

69. The compound of claim 68 having the structure:



or a pharmaceutically acceptable salt thereof, wherein;

5 M is N or N \rightarrow O;

B is selected from the group consisting of hydrido, trialkylsilyl, C₂-C₄ alkyl, C₃-C₅ alkylenyl, C₃-C₄ alkenyl, C₃-C₄ alkynyl, and C₂-C₄ haloalkyl, wherein each member of group B is optionally substituted at any carbon up to and including 3 atoms from the point of attachment of B to A with one or more of the group consisting of R³², R³³, and R³⁴;

10 R³², R³³, and R³⁴ are independently selected from the group consisting of hydrido, acetamido, haloacetamido, amidino, guanidino, alkoxy, hydroxy, amino, alkoxyamino, alkylamino, alkylthio, amidosulfonyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, hydroxyhaloalkyl, carboalkoxy, carboxy, carboxamido, and cyano;

15 A is (CH(R¹⁵))_{pa}-N(R⁷) wherein pa is an integer selected from 0 through 2 and R⁷ is hydrido or alkyl;

R¹⁵ is selected from the group consisting of hydrido, halo, alkyl, and haloalkyl;

Ja is N or C-X⁰;

Jb is N or C-R¹;

20 R¹ and X⁰ are independently selected from the group consisting of hydrido, alkyl, cyano, halo, haloalkyl, haloalkoxy, amino, aminoalkyl, alkylamino, amidino, hydroxy, hydroxyamino, alkoxy, hydroxyalkyl, alkoxyamino, thiol, and alkylthio;

R² is Z⁰-Q;

Z⁰ is a bond or CH₂;

Q is phenyl or a heteroaryl of 5 or 6 ring members,
wherein a carbon adjacent to the carbon at the point of
attachment of said phenyl or heteroaryl ring to Z⁰ is
optionally substituted by R⁹, the other carbon adjacent to
the carbon at the point of attachment is optionally
substituted by R¹³, a carbon adjacent to R⁹ and two atoms
from the carbon at the point of attachment is optionally
substituted by R¹⁰, a carbon adjacent to R¹³ and two atoms
from the carbon at the point of attachment is optionally
substituted by R¹², and any carbon adjacent to both R¹⁰ and
R¹² is optionally substituted by R¹¹;

R⁹, R¹¹, and R¹³ are independently selected from the
group consisting of hydrido, hydroxy, amino, amidino,
guanidino, alkylamino, alkylthio, alkylsulfonamido,
alkylsulfinyl, alkylsulfonyl, amidosulfonyl, alkyl,
alkoxy, halo, haloalkyl, haloalkoxy, hydroxyalkyl,
hydroxyhaloalkyl, carboxy, carboxamido, and cyano;

R¹⁰ and R¹² are independently selected from the group
consisting of hydrido, acetamido, haloacetamido,
amidino, guanidino, alkyl, aryl, aralkyl, cycloalkyl,
cycloalkylalkyl, heteroaryl, heterocyclyl, alkoxy,
cycloalkoxy, cycloalkylalkoxy, aralkoxy, aryloxy,
heteroaryloxy, heteroaralkoxy, heterocyclxyloxy,
heterocyclalkoxy, hydroxy, amino, alkoxyamino,
alkylamino, arylamino, aralkylamino, heteroarylarnino,
heteroaralkylamino, heterocyclylamino,
heterocyclalkylamino, alkylsulfonamido, amidosulfonyl,
arylsulfinyl, aralkylsulfinyl, cycloalkylsulfinyl,
heteroarylsulfinyl, arylsulfonyl, aralkylsulfonyl,
cycloalkylsulfonyl, heteroarylsulfonyl, hydroxyalkyl,
hydroxyhaloalkyl, aminoalkyl, carboalkoxy, carboxy,
carboxyalkyl, carboxamido, halo, haloalkyl, and cyano;

Y⁰ is phenyl or a heteroaryl of 5 or 6 ring members,
wherein one carbon of said phenyl or said heteroaryl is

substituted by Q^a, a carbon two or three atoms from the point of attachment of Q^a to said phenyl or said heteroaryl is substituted by Q^b, a carbon adjacent to the point of attachment of Q^a is optionally substituted by R¹⁷, another carbon adjacent to the point of attachment of Q^a is optionally substituted by R¹⁸, a carbon adjacent to Q^b is optionally substituted by R¹⁶, and another carbon adjacent to Q^b is optionally substituted by R¹⁹;

R¹⁷ and R¹⁸ are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, haloalkylthio, alkoxy, hydroxy, amino, alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano;

R¹⁶ and R¹⁹ are selected from the group consisting of:

(i) hydrido, amidino, guanidino, carboxy, haloalkylthio, alkoxy, hydroxy, amino, alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano;

(ii) NR²⁰R²¹, N(R²⁶)C(NR²⁵)N(R²³)(R²⁴), and C(NR²⁵)NR²³R²⁴, with the proviso that R¹⁶, R¹⁹, and Q^b are not simultaneously hydrido;

Q^b is selected from the group consisting of NR²⁰R²¹, hydrido, C(NR²⁵)NR²³R²⁴, and N(R²⁶)C(NR²⁵)N(R²³)(R²⁴), with the proviso that no more than one of R²⁰ and R²¹ is hydroxy at the same time and with the further proviso that no more than one of R²³ and R²⁴ is hydroxy at the same time;

R²⁰, R²¹, R²³, R²⁴, R²⁵, and R²⁶ are independently selected from the group consisting of hydrido, alkyl, and hydroxy;

Q^a is selected from the group consisting of a bond, CH₂, and CH₂CH₂.

70. The compound of claim 69 or a pharmaceutically acceptable salt thereof, wherein;

M is N or N→O;

B is selected from the group consisting of ethyl, 2-propenyl, 2-propynyl, propyl, isopropyl, -CH₂CH₂CH₂-, -CH₂CH₂CH₂CH₂-, butyl, 2-butenyl, 3-butenyl, 2-butynyl, sec-butyl, tert-butyl, isobutyl, 2-methylpropenyl, 2,2,2-trifluoroethyl, 3,3,3-trifluoropropyl, and 2,2-difluoropropyl, wherein each member of group B is optionally substituted at any carbon up to and including 3 atoms from the point of attachment of B to A with one or more of the group consisting of R³², R³³, and R³⁴;

R³², R³³, and R³⁴ are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, methoxy, ethoxy, isopropoxy, propoxy, hydroxy, amino, methoxyamino, ethoxyamino, acetamido, trifluoroacetamido, N-methylamino, dimethylamino, N-ethylamino, methylthio, ethylthio, isopropylthio, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, trifluoromethoxy, 1,1,2,2-tetrafluoroethoxy, fluoro, chloro, bromo, amidosulfonyl, N-methylamidosulfonyl, N,N-dimethylamidosulfonyl, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl,

2,2,2-trifluoro-1-hydroxyethyl, methoxycarbonyl, ethoxycarbonyl, amidocarbonyl, N-methylamidocarbonyl, N,N-dimethylamidocarbonyl, and cyano;

A is selected from the group consisting of a bond, NH, and N(CH₃);

J_a is N or C-X⁰;

J_b is N or C-R¹;

R¹ and X⁰ are independently selected from the group consisting of hydrido, hydroxy, amino, amidino, hydroxyamino, aminomethyl, 1-aminoethyl, methylamino, dimethylamino, cyano, methyl, ethyl, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, methoxy, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, methoxyamino, methylthio, ethylthio, trifluoromethoxy, 1,1,2,2-tetrafluoroethoxy, fluoro, chloro, and bromo;

R² is Z⁰-Q;

Z⁰ is a bond or CH₂;

Q is selected from the group consisting of phenyl, 2-thienyl, 3-thienyl, 2-furyl, 3-furyl, 2-pyrrolyl, 3-pyrrolyl, 2-imidazolyl, 4-imidazolyl, 3-pyrazolyl, 4-pyrazolyl, 2-thiazolyl, 3-isoxazolyl, 5-isoxazolyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, 2-pyrazinyl, 2-pyrimidinyl, 4-pyrimidinyl, 5-pyrimidinyl, 3-pyridazinyl, 4-pyridazinyl, and 1,3,5-triazin-2-yl, wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to Z⁰ is optionally substituted by R⁹, the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R¹³, a carbon adjacent to R⁹ and two atoms from the carbon at the point of attachment is optionally substituted by R¹⁰, a carbon adjacent to R¹³ and two atoms from the carbon at the point of attachment is optionally substituted by R¹², and any carbon adjacent to both R¹⁰ and R¹² is optionally substituted by R¹¹;

R⁹, R¹¹, and R¹³ are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, methyl, ethyl, propyl, isopropyl, methoxy, ethoxy, isopropoxy, propoxy, hydroxy, amino, N-methylamino, N,N-dimethylamino, N-ethylamino, methylthio, ethylthio, isopropylthio, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, 2,2,3,3,3-pentafluoropropyl, trifluoromethoxy, 1,1,2,2-tetrafluoroethoxy, fluoro, chloro, bromo, methanesulfonamido, amidosulfonyl, N-methylamidosulfonyl, N,N-dimethylamidosulfonyl, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, 2,2,2-trifluoro-1-hydroxyethyl, amidocarbonyl, N-methylamidocarbonyl, N,N-dimethylamidocarbonyl, and cyano;

R¹⁰ and R¹² are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, carboxymethyl, methyl, ethyl, propyl, isopropyl, methoxy,

ethoxy, isopropoxy, propoxy, hydroxy, amino,
methoxyamino, ethoxyamino, acetamido,
trifluoroacetamido, aminomethyl,
1-aminoethyl, 2-aminoethyl, N-methylamino, dimethylamino,
5 N-ethylamino, methanesulfonamido, amidosulfonyl, N-
methylamidosulfonyl, N,N-dimethylamidosulfonyl,
hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, 2,2,2-
trifluoro-1-hydroxyethyl, methoxycarbonyl,
ethoxycarbonyl, amidocarbonyl, N-methylamidocarbonyl,
10 N,N-dimethylamidocarbonyl, N-benzylamidocarbonyl, N-(2-
chlorobenzyl)amidocarbonyl, N-(3-
fluorobenzyl)amidocarbonyl, N-(2-
trifluoromethylbenzyl)amidocarbonyl, N-(1-
phenylethyl)amidocarbonyl, N-(1-methyl-1-
15 phenylethyl)amidocarbonyl, N-benzylamidosulfonyl, N-(2-
chlorobenzyl)amidosulfonyl, N-isopropylamidocarbonyl, N-
cyclobutylamidocarbonyl, N-cyclopentylamidocarbonyl,
fluoro, chloro, bromo, cyano, cyclobutoxy, cyclohexoxy,
cyclohexylmethoxy, 4-trifluoromethylcyclohexylmethoxy,
20 cyclopentoxy, benzyl, benzyloxy, 4-bromo-3-fluorophenoxy,
3-bromobenzyloxy, 4-bromobenzyloxy, 4-bromobenzylamino,
5-bromopyrid-2-ylmethylamino, 4-butoxyphenamino, 3-
chlorobenzyl, 4-chlorophenoxy, 4-chloro-3-ethylphenoxy,
4-chloro-3-ethylbenzylamino, 4-chloro-3-ethylphenylamino,
25 3-chlorobenzyloxy, 4-chlorobenzyloxy, 4-
chlorobenzylsulfonyl, 4-chlorophenylamino, 4-
chlorophenylsulfonyl, 5-chloropyrid-3-yloxy, 2-cyanopyrid-
3-yloxy, 2,3-difluorobenzyloxy, 2,4-difluorobenzyloxy,
3,4-difluorobenzyloxy, 2,5-difluorobenzyloxy, 3,5-
30 difluorophenoxy, 3,5-difluorobenzyloxy, 4-
difluoromethoxybenzyloxy, 2,3-difluorophenoxy, 2,4-
difluorophenoxy, 2,5-difluorophenoxy, 3,5-
dimethylphenoxy, 3,4-dimethylphenoxy, 3,4-
dimethylbenzyloxy, 3,5-dimethylbenzyloxy, 4-
35 ethoxyphenoxy, 4-ethylbenzyloxy, 3-ethylphenoxy, 4-
ethylaminophenoxy, 3-ethyl-5-methylphenoxy, 4-

fluorobenzylloxy, 2-fluoro-3-trifluoromethylbenzylloxy, 3-fluoro-5-trifluoromethylbenzylloxy, 4-fluoro-2-trifluoromethylbenzylloxy, 4-fluoro-3-trifluoromethylbenzylloxy, 2-fluorophenoxy, 4-fluorophenoxy, 2-fluoro-3-trifluoromethylphenoxy, 2-fluorobenzylloxy, 4-fluorophenylamino, 2-fluoro-4-trifluoromethylphenoxy, 4-isopropylbenzylloxy, 3-isopropylphenoxy, 4-isopropylphenoxy, 4-isopropyl-3-methylphenoxy, 4-isopropylbenzylloxy, 3-isopropylphenoxy, 4-isopropyl-3-methylphenoxy, phenylamino, 1-phenylethoxy, 2-phenylethoxy, 2-phenylethyl, 2-phenylethylamino, phenylsulfonyl, 3-trifluoromethoxybenzylloxy, 4-trifluoromethoxybenzylloxy, 3-trifluoromethoxyphenoxy, 4-trifluoromethoxyphenoxy, 3-trifluoromethylbenzylloxy, 4-trifluoromethylbenzylloxy, 2,4-bis-trifluoromethylbenzylloxy, 3-trifluoromethylbenzyl, 3,5-bis-trifluoromethylbenzylloxy, 4-trifluoromethylphenoxy, 3-trifluoromethylphenoxy, 3-trifluoromethylthiobenzylloxy, 4-trifluoromethylthiobenzylloxy, 2,3,4-trifluorophenoxy, 2,3,5-trifluorophenoxy, 3-pentafluoroethylphenoxy, 3-(1,1,2,2-tetrafluoroethoxy)phenoxy, and 3-trifluoromethylthiophenoxy; —

Y^0 is selected from the group consisting of:

25 1- Q^b -4- Q^s -2- R^{16} -3- R^{17} -5- R^{18} -6- R^{19} benzene,
 2- Q^b -5- Q^s -6- R^{17} -4- R^{18} -3- R^{19} pyridine,
 3- Q^b -6- Q^s -2- R^{16} -5- R^{18} -4- R^{19} pyridine, 2- Q^b -5- Q^s -3- R^{16} -6- R^{18} pyrazine,
 3- Q^b -6- Q^s -2- R^{18} -5- R^{18} -4- R^{19} pyridazine,
 30 2- Q^b -5- Q^s -4- R^{17} -6- R^{18} pyrimidine, 5- Q^b -2- Q^s -4- R^{16} -6- R^{19} pyrimidine,
 3- Q^b -5- Q^s -4- R^{16} -2- R^{19} thiophene, 2- Q^b -5- Q^s -3- R^{16} -4- R^{17} thiophene,
 3- Q^b -5- Q^s -4- R^{16} -2- R^{19} furan, 2- Q^b -5- Q^s -3- R^{16} -4- R^{17} furan,
 35 3- Q^b -5- Q^s -4- R^{16} -2- R^{19} pyrrole, 2- Q^b -5- Q^s -3- R^{16} -4- R^{17} pyrrole,
 4- Q^b -2- Q^s -5- R^{19} imidazole, 2- Q^b -4- Q^s -5- R^{17} imidazole,

3-Q^b-5-Q^s-4-R¹⁶isoxazole, 5-Q^b-3-Q^s-4-R¹⁶isoxazole,
 2-Q^b-5-Q^s-4-R¹⁶pyrazole, 4-Q^b-2-Q^s-5-R¹⁹thiazole, and
 2-Q^b-5-Q^s-4-R¹⁷thiazole;

R¹⁷ and R¹⁸ are independently selected from the group
 5 consisting of hydrido, methyl, ethyl, isopropyl, propyl,
 carboxy, amidino, guanidino, methoxy, ethoxy, isopropoxy,
 propoxy, hydroxy, amino, aminomethyl, 1-aminoethyl, 2-
 aminoethyl, N-methylamino, dimethylamino, N-ethylamino,
 methylthio, ethylthio, isopropylthio,
 10 trifluoromethylthio, methylsulfinyl, ethylsulfinyl,
 methylsulfonyl, ethylsulfonyl, trifluoromethyl,
 pentafluoroethyl, 2,2,2-trifluoroethyl, 2,2,3,3,3-
 pentafluoropropyl, trifluoromethoxy, 1,1,2,2-
 tetrafluoroethoxy, fluoro, chloro, bromo, hydroxymethyl,
 15 1-hydroxyethyl, 2-hydroxyethyl, and cyano;

R¹⁶ and R¹⁹ are selected from the group consisting of:

(i) hydrido, methyl, ethyl, isopropyl, propyl,
 carboxy, amidino, guanidino, methoxy, ethoxy, isopropoxy,
 propoxy, hydroxy, amino, aminomethyl, 1-aminoethyl, 2-
 aminoethyl, N-methylamino, dimethylamino, N-ethylamino,
 methylthio, ethylthio, isopropylthio,
 trifluoromethylthio, methylsulfinyl, ethylsulfinyl,
 methylsulfonyl, ethylsulfonyl, trifluoromethyl,
 pentafluoroethyl, 2,2,2-trifluoroethyl, 2,2,3,3,3-
 pentafluoropropyl, trifluoromethoxy, 1,1,2,2-
 tetrafluoroethoxy, fluoro, chloro, bromo, hydroxymethyl,
 1-hydroxyethyl, 2-hydroxyethyl, and cyano; and

(ii) NR²⁰R²¹, N(R²⁶)C(NR²⁵)N(R²³)(R²⁴), and C(NR²⁵)NR²³R²⁴,
 with the proviso that R¹⁶, R¹⁹, and Q^b are not
 30 simultaneously hydrido;

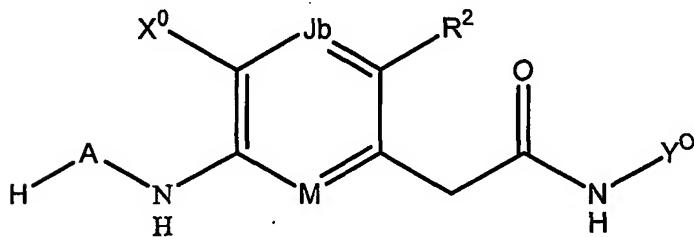
Q^b is selected from the group consisting of NR²⁰R²¹,
 hydrido, C(NR²⁵)NR²³R²⁴, and N(R²⁶)C(NR²⁵)N(R²³)(R²⁴), with the
 proviso that no more than one of R²⁰, R²¹, R²³, and R²⁴ can
 be hydroxy, when any two of the group consisting of R²⁰,
 35 R²¹, R²³, and R²⁴ are bonded to the same atom and with
 the further proviso that said Q^b group is bonded directly

to a carbon atom;

R^{20} , R^{21} , R^{23} , R^{24} , R^{25} , and R^{26} are independently selected from the group consisting of hydrido, methyl, ethyl, propyl, butyl, isopropyl, and hydroxy;

5 Q^s is selected from the group consisting of a bond, CH_2 , and CH_2CH_2 .

71. The compound of claim 70 having the structure:



or a pharmaceutically acceptable salt thereof, wherein;

M is N or $N\rightarrow O$;

10 A is selected from the group consisting of $CH_2N(CH_3)$, $CH_2N(CH_2CH_3)$, $CH_2CH_2N(CH_3)$, and $CH_2CH_2N(CH_2CH_3)$;

Jb is N or $C-R^1$;

15 R^1 and X^o are independently selected from the group consisting of hydrido, hydroxy, amino, amidino, hydroxyamino, aminomethyl, 1-aminoethyl, methylamino, dimethylamino, cyano, methyl, ethyl, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, methoxy, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, methoxyamino, methylthio, ethylthio, trifluoromethoxy, 20 1,1,2,2-tetrafluoroethoxy, fluoro, chloro, and bromo;

R^2 is Z^o-Q ;

Z^o is a bond or CH_2 ;

25 Q is selected from the group consisting of phenyl, 2-thienyl, 3-thienyl, 2-furyl, 3-furyl, 2-pyrrolyl, 3-pyrrolyl, 2-imidazolyl, 4-imidazolyl, 3-pyrazolyl, 4-pyrazolyl, 2-thiazolyl, 3-isoxazolyl, 5-isoxazolyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, 2-pyrazinyl, 2-pyrimidinyl, 4-pyrimidinyl, 5-pyrimidinyl, 3-pyridazinyl, 4-pyridazinyl, and 1,3,5-triazin-2-yl, wherein a carbon

adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to Z^0 is optionally substituted by R^9 , the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R^{13} , a 5 carbon adjacent to R^9 and two atoms from the carbon at the point of attachment is optionally substituted by R^{10} , a carbon adjacent to R^{13} and two atoms from the carbon at the point of attachment is optionally substituted by R^{12} , and any carbon adjacent to both R^{10} and R^{12} is optionally 10 substituted by R^{11} ;

R^9 , R^{11} , and R^{13} are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, methyl, ethyl, propyl, isopropyl, methoxy, ethoxy, isopropoxy, propoxy, hydroxy, amino, N-methylamino, 15 N,N-dimethylamino, N-ethylamino, methylthio, ethylthio, isopropylthio, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, 2,2,3,3,3-pentafluoropropyl, trifluoromethoxy, 1,1,2,2-tetrafluoroethoxy, fluoro, chloro, bromo, methanesulfonamido, amidosulfonyl, N- 20 methylamidosulfonyl, N,N-dimethylamidosulfonyl, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, 2,2,2-trifluoro-1-hydroxyethyl, amidocarbonyl, N-methylamidocarbonyl, N,N-dimethylamidocarbonyl, and cyano;

R^{10} and R^{12} are independently selected from the group 25 consisting of hydrido, amidino, guanidino, carboxy, carboxymethyl, methyl, ethyl, propyl, isopropyl, methoxy, ethoxy, isopropoxy, propoxy, hydroxy, amino, methoxyamino, ethoxyamino, acetamido, trifluoroacetamido, aminomethyl, 1-aminoethyl, 2-aminoethyl, N-methylamino, dimethylamino, N-ethylamino, methanesulfonamido, amidosulfonyl, N-methylamidosulfonyl, N,N-dimethylamidosulfonyl, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, 2,2,2-trifluoro-1-hydroxyethyl, 30 methoxycarbonyl, ethoxycarbonyl, amidocarbonyl, N-methylamidocarbonyl, N,N-dimethylamidocarbonyl, N-

benzylamidocarbonyl, N-(2-chlorobenzyl)amidocarbonyl,
N-(3-fluorobenzyl)amidocarbonyl, N-(2-
trifluoromethylbenzyl)amidocarbonyl, N-(1-
phenylethyl)amidocarbonyl, N-(1-methyl-1-
5 phenylethyl)amidocarbonyl, N-benzylamidosulfonyl, N-(2-
chlorobenzyl)amidosulfonyl, N-isopropylamidocarbonyl, N-
cyclobutylamidocarbonyl, N-cyclopentylamidocarbonyl,
fluoro, chloro, bromo, cyano, cyclobutoxy, cyclohexoxy,
cyclohexylmethoxy, 4-trifluoromethycyclohexylmethoxy,
10 cyclopentoxy, benzyl, benzyloxy, 4-bromo-3-fluorophenoxy,
3-bromobenzyloxy, 4-bromobenzyloxy, 4-bromobenzylamino,
5-bromopyrid-2-ylmethylamino, 4-butoxyphenamino, 3-
chlorobenzyl, 4-chlorophenoxy, 4-chloro-3-ethylphenoxy,
4-chloro-3-ethylbenzylamino, 4-chloro-3-ethylphenylamino,
15 3-chlorobenzyloxy, 4-chlorobenzyloxy, 4-
chlorobenzylsulfonyl, 4-chlorophenylamino, 4-
chlorophenylsulfonyl, 5-chloropyrid-3-yloxy, 2-
cyanopyrid-3-yloxy, 2,3-difluorobenzyloxy, 2,4-
difluorobenzyloxy, 3,4-difluorobenzyloxy, 2,5-
20 difluorobenzyloxy, 3,5-difluorophenoxy, 3,5-
difluorobenzyloxy, 4-difluoromethoxybenzyloxy, 2,3-
difluorophenoxy, 2,4-difluorophenoxy, 2,5-
difluorophenoxy, 3,5-dimethylphenoxy, 3,4-
dimethylphenoxy, 3,4-dimethylbenzyloxy, 3,5-
25 dimethylbenzyloxy, 4-ethoxyphenoxy, 4-ethylbenzyloxy, 3-
ethylphenoxy, 4-ethylaminophenoxy, 3-ethyl-5-
methylphenoxy, 4-fluorobenzyloxy, 2-fluoro-3-
trifluoromethylbenzyloxy, 3-fluoro-5-
trifluoromethylbenzyloxy, 4-fluoro-2-
30 trifluoromethylbenzyloxy, 4-fluoro-3-
trifluoromethylbenzyloxy, 2-fluorophenoxy, 4-
fluorophenoxy, 2-fluoro-3-trifluoromethylphenoxy, 2-
fluorobenzyloxy, 4-fluorophenylamino, 2-fluoro-4-
trifluoromethylphenoxy, 4-isopropylbenzyloxy, 3-
35 isopropylphenoxy, 4-isopropylphenoxy, 4-isopropyl-3-
methylphenoxy, 4-isopropylbenzyloxy, 3-isopropylphenoxy,

4-isopropylphenoxy, 4-isopropyl-3-methylphenoxy, phenylamino, 1-phenylethoxy, 2-phenylethoxy, 2-phenylethyl, 2-phenylethylamino, phenylsulfonyl, 3-trifluoromethoxybenzyloxy, 4-trifluoromethoxybenzyloxy, 5 3-trifluoromethoxyphenoxy, 4-trifluoromethoxyphenoxy, 3-trifluoromethylbenzyloxy, 4-trifluoromethylbenzyloxy, 2,4-bis-trifluoromethylbenzyloxy, 3-trifluoromethylbenzyl, 3,5-bis-trifluoromethylbenzyloxy, 4-trifluoromethylphenoxy, 3-trifluoromethylphenoxy, 3-trifluoromethylthiobenzyloxy, 4-trifluoromethylthiobenzyloxy, 2,3,4-trifluorophenoxy, 2,3,5-trifluorophenoxy, 3-pentafluoroethylphenoxy, 3-(1,1,2,2-tetrafluoroethoxy)phenoxy, and 3-trifluoromethylthiophenoxy;

15 Y^0 is selected from the group consisting of:

1- Q^b -4- Q^s -2- R^{16} -3- R^{17} -5- R^{18} -6- R^{19} benzene, 2- Q^b -5- Q^s -6- R^{17} -4- R^{18} -3- R^{19} pyridine, 3- Q^b -6- Q^s -2- R^{16} -5- R^{18} -4- R^{19} pyridine, 2- Q^b -5- Q^s -3- R^{16} -6- R^{18} pyrazine, 3- Q^b -6- Q^s -2- R^{18} -5- R^{18} -4- R^{19} pyridazine, 2- Q^b -5- Q^s -4- R^{17} -6- R^{18} pyrimidine, 5- Q^b -2- Q^s -4- R^{16} -6- R^{19} pyrimidine, 3- Q^b -5- Q^s -4- R^{16} -2- R^{19} thiophene, 2- Q^b -5- Q^s -3- R^{16} -4- R^{17} thiophene, 3- Q^b -5- Q^s -4- R^{16} -2- R^{19} furan, 2- Q^b -5- Q^s -3- R^{16} -4- R^{17} furan, 3- Q^b -5- Q^s -4- R^{16} -2- R^{19} pyrrole, 2- Q^b -5- Q^s -3- R^{16} -4- R^{17} pyrrole, 4- Q^b -2- Q^s -5- R^{19} imidazole, 2- Q^b -4- Q^s -5- R^{17} imidazole, 3- Q^b -5- Q^s -4- R^{16} isoxazole, 5- Q^b -3- Q^s -4- R^{16} isoxazole, 2- Q^b -5- Q^s -4- R^{16} pyrazole, 4- Q^b -2- Q^s -5- R^{19} thiazole, and 2- Q^b -5- Q^s -4- R^{17} thiazole;

30 R^{16} , R^{17} , R^{18} , and R^{19} are independently selected from the group consisting of hydrido, methyl, ethyl, isopropyl, propyl, amidino, guanidino, methoxy, ethoxy, isopropoxy, propoxy, hydroxy, amino, aminomethyl, 1-aminoethyl, 2-aminoethyl, N-methylamino, dimethylamino, N-ethylamino, methylthio, ethylthio, isopropylthio, trifluoromethylthio, methylsulfinyl, ethylsulfinyl, methylsulfonyl, ethylsulfonyl, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, 2,2,3,3,3-pentafluoropropyl, trifluoromethoxy, 1,1,2,2-

tetrafluoroethoxy, fluoro, chloro, bromo, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, and cyano;

Q^b is selected from the group consisting of NR²⁰R²¹, C(NR²⁵)NR²³R²⁴, and N(R²⁶)C(NR²⁵)N(R²³)(R²⁴), with the proviso that no more than one of R²⁰, R²¹, R²³, and R²⁴ can be hydroxy, when any two of the group consisting of R²⁰, R²¹, R²³, and R²⁴ are bonded to the same atom, and with the further proviso that said Q^b group is bonded directly to a carbon atom;

R²⁰, R²¹, R²³, R²⁴, R²⁵, and R²⁶ are independently selected from the group consisting of hydrido, methyl, ethyl, propyl, butyl, isopropyl, and hydroxy;

Q^s is selected from the group consisting of a bond, CH₂, and CH₂CH₂.

72. The compound of claim 71 or a pharmaceutically acceptable salt thereof, wherein;

M is N→O;

A is selected from the group consisting of CH₂N(CH₃), CH₂N(CH₂CH₃), CH₂CH₂N(CH₃), and CH₂CH₂N(CH₂CH₃);

Jb is C-R¹;

R¹ and X° are independently selected from the group consisting of hydrido, hydroxy, amino, amidino, hydroxyamino, aminomethyl, methylamino, cyano, methyl, trifluoromethyl, methoxy, hydroxymethyl, methoxyamino, methylthio, trifluoromethoxy, fluoro, and chloro;

R² is Z⁰-Q;

Z⁰ is a bond or CH₂;

Q is selected from the group consisting of 3-amidocarbonyl-5-aminophenyl, 3-amino-5-(N-benzylamidocarbonyl)phenyl, 3-amino-5-benzylphenyl, 3-amino-5-(2-phenylethyl)phenyl, 3-amino-5-benzylaminophenyl, 3-amino-5-(2-phenylethylamino)phenyl, 3-amino-5-benzylxyphenyl, 3-amino-5-(2-phenylethoxy)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(3-

fluorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-methyl-1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-
5 benzylamidosulfonyl)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, 3-amino-5-(N-ethylamidocarbonyl)phenyl, 3-amino-5-(N-isopropylamidocarbonyl)phenyl, 3-amino-5-(N-propylamidocarbonyl)phenyl, 3-amino-5-(N-
10 isobutylamidocarbonyl)phenyl, 3-amino-5-(N-(2-butyl)amidocarbonyl)phenyl, 3-amino-5-(N-cyclobutylamidocarbonyl)phenyl, 3-amino-5-(N-cyclopentylamidocarbonyl)phenyl, 3-amino-5-(N-cyclohexylamidocarbonyl)phenyl, 5-amino-2-fluorophenyl,
15 3-amino-5-hydroxymethylphenyl, 5-amino-3-methoxycarbonylphenyl, 3-amidinophenyl, 3-amino-2-methylphenyl, 5-amino-2-methylthiophenyl, 3-aminophenyl, 3-carboxyphenyl, 3-carboxy-5-hydroxyphenyl, 3-amino-5-carboxyphenyl, 3-chlorophenyl, 2-chlorophenyl, 3-cyanophenyl, 3,5-diaminophenyl, 3-dimethylaminophenyl, 2-fluorophenyl, 3-fluorophenyl, 2-hydroxyphenyl, 3-hydroxyphenyl, 3-methanesulfonylaminophenyl, 2-methoxyphenyl, 3-methoxyphenyl, 3-methoxyaminophenyl, 3-methoxycarbonylphenyl, 2-methylaminophenyl, 3-
20 methylaminophenyl, 2-methylphenyl, 3-methylphenyl, 4-methylphenyl, phenyl, 3-trifluoroacetamidophenyl, 3-trifluoromethylphenyl, 2-trifluoromethylphenyl, 5-amino-2-thienyl, 5-amino-3-thienyl, 3-bromo-2-thienyl, 3-pyridyl, 4-pyridyl, 2-thienyl, and 3-thienyl;

30 Y⁰ is selected from the group consisting of:

1-Q^b-4-Q^s-2-R¹⁶-3-R¹⁷-5-R¹⁸-6-R¹⁹benzene, 2-Q^b-5-Q^s-6-R¹⁷-4-R¹⁸-3-R¹⁹pyridine, 3-Q^b-6-Q^s-2-R¹⁶-5-R¹⁸-4-R¹⁹pyridine, 3-Q^b-5-Q^s-4-R¹⁶-2-R¹⁹thiophene, and 2-Q^b-5-Q^s-3-R¹⁶-4-R¹⁷thiophene;

35 R¹⁶ and R¹⁹ are independently selected from the group consisting of hydrido, amidino, amino, aminomethyl, methoxy, methylamino, hydroxy, hydroxymethyl, fluoro,

chloro, and cyano;

R¹⁷ and R¹⁸ are independently selected from the group consisting of hydrido, fluoro, chloro, hydroxy, hydroxymethyl, amino, carboxy, and cyano;

5 Q^b is C(NR²⁵)NR²³R²⁴;

R²³, R²⁴, and R²⁵ are independently selected from the group consisting of hydrido and methyl;

Q^s is CH₂.

10 73. The compound of claim 72 or a pharmaceutically acceptable salt thereof wherein the compound is selected from the group consisting of:

2-[2-[N-[[4-aminoiminomethylphenyl]methyl]-3-[3-aminophenyl]-6-[N,N-dimethylhydrazino]-1-oxypyridinyl]acetamide;

15 2-[2-[N-[[4-aminoiminomethylphenyl]methyl]-3-[3-aminophenyl]-6-[N-ethyl-N-methylhydrazino]-1-oxypyridinyl]acetamide;

2-[2-[N-[[4-aminoiminomethylphenyl]methyl]-3-[3-aminophenyl]-5-chloro-6-[N,N-dimethylhydrazino]-1-oxypyridinyl]acetamide;

20 2-[2-[N-[[4-aminoiminomethylphenyl]methyl]-3-[3,5-diaminophenyl]-6-[N,N-dimethylhydrazino]-1-oxypyridinyl]acetamide;

2-[2-[N-[[4-aminoiminomethylphenyl]methyl]-3-[3,5-diaminophenyl]-6-[N-ethyl-N-methylhydrazino]-1-oxypyridinyl]acetamide;

25 2-[2-[N-[[4-aminoiminomethylphenyl]methyl]-3-[3,5-diaminophenyl]-5-chloro-6-[N,N-dimethylhydrazino]-1-oxypyridinyl]acetamide;

30 2-[2-[N-[[4-aminoiminomethylphenyl]methyl]-3-[3,5-diaminophenyl]-5-chloro-6-[N-ethyl-N-methylhydrazino]-1-oxypyridinyl]acetamide;

35 2-[2-[N-[[4-aminoiminomethylphenyl]methyl]-3-[3,5-diaminophenyl]-5-chloro-6-[N-ethyl-N-methylhydrazino]-1-oxypyridinyl]acetamide;

2-[2-[N-[[4-aminoiminomethylphenyl]methyl]-3-[3-amino-5-carboxyphenyl]-6-[N,N-dimethylhydrazino]-1-oxypyridinyl]acetamide;

5 2-[2-[N-[[4-aminoiminomethylphenyl]methyl]-3-[3-amino-5-carboxyphenyl]-6-[N-ethyl-N-methylhydrazino]-1-oxypyridinyl]acetamide;

2-[2-[N-[[4-aminoiminomethylphenyl]methyl]-3-[3-amino-5-carboxyphenyl]-5-chloro-6-[N,N-dimethylhydrazino]-1-oxypyridinyl]acetamide;

10 2-[2-[N-[[4-aminoiminomethylphenyl]methyl]-3-[3-amino-5-carboxyphenyl]-5-chloro-6-[N-ethyl-N-methylhydrazino]-1-oxypyridinyl]acetamide;

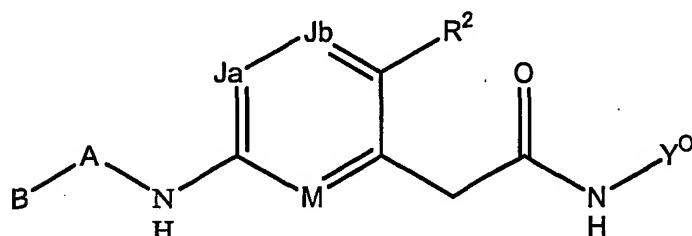
15 2-[2-[N-[[4-aminoiminomethylphenyl]methyl]-3-[3-amino-5-(N-benzylamidocarbonyl)phenyl]-6-[N,N-dimethylhydrazino]-1-oxypyridinyl]acetamide;

2-[2-[N-[[4-aminoiminomethylphenyl]methyl]-3-[3-amino-5-(N-benzylamidocarbonyl)phenyl]-6-[N-ethyl-N-methylhydrazino]-1-oxypyridinyl]acetamide;

20 2-[2-[N-[[4-aminoiminomethylphenyl]methyl]-3-[3-amino-5-(N-benzylamidocarbonyl)phenyl]-5-chloro-6-[N,N-dimethylhydrazino]-1-oxypyridinyl]acetamide;

2-[2-[N-[[4-aminoiminomethylphenyl]methyl]-3-[3-amino-5-(N-benzylamidocarbonyl)phenyl]-5-chloro-6-[N-ethyl-N-methylhydrazino]-1-oxypyridinyl]acetamide.

25 74. The compound of claim 67 having the structure:



or a pharmaceutically acceptable salt thereof, wherein;

M is N or N→O;

B is phenyl or a heteroaryl of 5 or 6 ring members, wherein a carbon adjacent to the carbon at the point of

attachment of said phenyl or heteroaryl ring to A is optionally substituted by R³², the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R³⁶, a carbon adjacent to R³² and two atoms from the carbon at the point of attachment is optionally substituted by R³³, a carbon adjacent to R³⁶ and two atoms from the carbon at the point of attachment is optionally substituted by R³⁵, and any carbon adjacent to both R³³ and R³⁵ is optionally substituted by R³⁴;

R³², R³³, R³⁴, R³⁵, and R³⁶ are independently selected from the group consisting of hydrido, acetamido, haloacetamido, amidino, guanidino, alkoxy, hydroxy, amino, alkoxyamino, alkylamino, alkylthio, amidosulfonyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxylalkyl, hydroxyhaloalkyl, carboalkoxy, carboxy, carboxamido, cyano, and Q^b;

A is a bond or (CH(R¹⁵))_{pa}-(W⁷)_{rr} wherein rr is 0 or 1, pa is an integer selected from 0 through 3, and W⁷ is (R⁷)NC(O) or N(R⁷);

R⁷ is selected from the group consisting of hydrido, hydroxy and alkyl;

R¹⁵ is selected from the group consisting of hydrido, halo, alkyl, and haloalkyl;

J_a is N or C-X⁰;

J_b is N or C-R¹;

R¹ and X⁰ are independently selected from the group consisting of hydrido, hydroxy, hydroxyamino, amidino, amino, cyano, hydroxylalkyl, alkoxy, alkyl, alkylamino, aminoalkyl, alkylthio, alkoxyamino, haloalkyl, haloalkoxy, and halo;

R² is Z⁰-Q;

Z⁰ is selected from the group consisting of a bond, CH₂, CH₂CH₂, W⁰-(CH(R⁴²))_p, wherein p is 0 or 1 and W⁰ is selected from the group consisting of O, S, and N(R⁴¹);

R⁴¹ and R⁴² are independently hydrido or alkyl;

Q is phenyl or a heteroaryl of 5 or 6 ring members,

wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to Z^0 is optionally substituted by R^9 , the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R^{13} , a carbon adjacent to R^9 and two atoms from the carbon at the point of attachment is optionally substituted by R^{10} , a carbon adjacent to R^{13} and two atoms from the carbon at the point of attachment is optionally substituted by R^{12} , and any carbon adjacent to both R^{10} and R^{12} is optionally substituted by R^{11} ;

R^9 , R^{11} , and R^{13} are independently selected from the group consisting of hydrido, hydroxy, amino, amidino, guanidino, alkylamino, alkylthio, alkylsulfonamido, alkylsulfinyl, alkylsulfonyl, amidosulfonyl, alkyl, alkoxy, halo, haloalkyl, haloalkoxy, hydroxyalkyl, hydroxyhaloalkyl, carboxy, carboxamido, and cyano;

R^{10} and R^{12} are independently selected from the group consisting of hydrido, acetamido, haloacetamido, amidino, guanidino, alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heterocyclyl, alkoxy, cycloalkoxy, cycloalkylalkoxy, aralkoxy, aryloxy, heteroaryloxy, heteroaralkoxy, heterocyclxyoxy, heterocyclylalkoxy, hydroxy, amino, alkoxyamino, alkylamino, arylamino, aralkylamino, heteroarylarnino, heteroaralkylamino, heterocyclylamino, heterocyclylalkylamino, alkylsulfonamido, amidosulfonyl, arylsulfinyl, aralkylsulfinyl, cycloalkylsulfinyl, heteroarylsulfinyl, arylsulfonyl, aralkylsulfonyl, cycloalkylsulfonyl, heteroarylsulfonyl, hydroxyalkyl, hydroxyhaloalkyl, aminoalkyl, carboalkoxy, carboxy, carboxyalkyl, carboxamido, halo, haloalkyl, and cyano;

Y^0 is phenyl or a heteroaryl of 5 or 6 ring members, wherein one carbon of said phenyl or said heteroaryl is substituted by Q^a , a carbon two or three atoms from the point of attachment of Q^a to said phenyl or said heteroaryl is substituted by Q^b , a carbon adjacent to the

point of attachment of Q^a is optionally substituted by R¹⁷, another carbon adjacent to the point of attachment of Q^a is optionally substituted by R¹⁸, a carbon adjacent to Q^b is optionally substituted by R¹⁶, and another carbon adjacent to Q^b is optionally substituted by R¹⁹;

R¹⁷ and R¹⁸ are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, haloalkylthio, alkoxy, hydroxy, amino, alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano;

R¹⁶ and R¹⁹ are selected from the group consisting of:

(i) hydrido, amidino, guanidino, carboxy, haloalkylthio, alkoxy, hydroxy, amino, alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano; and

(ii) NR²⁰R²¹ or C(NR²⁵)NR²³R²⁴, with the proviso that R¹⁶, R¹⁹, and Q^b are not simultaneously hydrido;

Q^b is selected from the group consisting of NR²⁰R²¹, hydrido, and C(NR²⁵)NR²³R²⁴, with the proviso that no more than one of R²⁰ and R²¹ is hydroxy at the same time and with the further proviso that no more than one of R²³ and R²⁴ is hydroxy at the same time;

R²⁰, R²¹, R²³, R²⁴, and R²⁵ are independently selected from the group consisting of hydrido, alkyl, and hydroxy;

Q^a is selected from the group consisting of a bond, CH₂, and CH₂CH₂.

75. The compound of claim 74 or a pharmaceutically acceptable salt thereof, wherein;

M is N or N→O;

B is selected from the group consisting of phenyl, 2-thienyl, 3-thienyl, 2-furyl, 3-furyl, 2-pyrrolyl, 3-pyrrolyl, 2-imidazolyl, 4-imidazolyl, 3-pyrazolyl, 4-pyrazolyl, 2-thiazolyl, 3-isoxazolyl, 5-isoxazolyl, 2-

pyridyl, 3-pyridyl, 4-pyridyl, 2-pyrazinyl, 2-pyrimidinyl, 4-pyrimidinyl, 5-pyrimidinyl, 3-pyridazinyl, 4-pyridazinyl, and 1,3,5-triazin-2-yl, wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to A is optionally substituted by R³², the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R³⁶, a carbon adjacent to R³² and two atoms from the carbon at the point of attachment is optionally substituted by R³³, a carbon adjacent to R³⁶ and two atoms from the carbon at the point of attachment is optionally substituted by R³⁵, and any carbon adjacent to both R³³ and R³⁵ is optionally substituted by R³⁴;

R³², R³³, R³⁴, R³⁵, and R³⁶ are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, methoxy, ethoxy, isopropoxy, propoxy, hydroxy, amino, methoxyamino, ethoxyamino, acetamido, trifluoroacetamido, N-methylamino, dimethylamino, N-ethylamino, methylthio, ethylthio, isopropylthio, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, 2,2,3,3,3-pentafluoropropyl, trifluoromethoxy, 1,1,2,2-tetrafluoroethoxy, fluoro, chloro, bromo, amidosulfonyl, N-methylamidosulfonyl, N,N-dimethylamidosulfonyl, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, 2,2,2-trifluoro-1-hydroxyethyl, methoxycarbonyl, ethoxycarbonyl, amidocarbonyl, N-methylamidocarbonyl, N,N-dimethylamidocarbonyl, cyano, and Q^b;

A is selected from the group consisting of a bond, NH, N(CH₃), N(OH), CH₂, CH₃CH, CF₃CH, NHC(O), N(CH₃)C(O), C(O)NH, C(O)N(CH₃), CH₂CH₂, CH₂CH₂CH₂, CH₃CHCH₂, and CF₃CHCH₂;

J_a is N or C-X⁰;

J_b is N or C-R¹;

R¹ and X⁰ are independently selected from the group consisting of hydrido, hydroxy, amino, amidino, hydroxyamino, aminomethyl, 1-aminoethyl, methylamino,

dimethylamino, cyano, methyl, ethyl, trifluoromethyl,
pentafluoroethyl, 2,2,2-trifluoroethyl, methoxy,
hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl,
methoxyamino, methylthio, ethylthio, trifluoromethoxy,
5 1,1,2,2-tetrafluoroethoxy, fluoro, chloro, and bromo;

R² is Z⁰-Q;

Z⁰ is selected from the group consisting of a bond,
CH₂, CH₂CH₂, O, S, NH, N(CH₃), OCH₂, SCH₂, N(H)CH₂, and
N(CH₃)CH₂;

10 Q is selected from the group consisting of phenyl,
2-thienyl, 3-thienyl, 2-furyl, 3-furyl, 2-pyrrolyl, 3-
pyrrolyl, 2-imidazolyl, 4-imidazolyl, 3-pyrazolyl, 4-
pyrazolyl, 2-thiazolyl, 3-isoxazolyl, 5-isoxazolyl, 2-
pyridyl, 3-pyridyl, 4-pyridyl, 2-pyrazinyl, 2-
15 pyrimidinyl, 4-pyrimidinyl, 5-pyrimidinyl, 3-pyridazinyl,
4-pyridazinyl, and 1,3,5-triazin-2-yl, wherein a carbon
adjacent to the carbon at the point of attachment of said
phenyl or heteroaryl ring to Z⁰ is optionally substituted
by R⁹, the other carbon adjacent to the carbon at the
20 point of attachment is optionally substituted by R¹³, a
carbon adjacent to R⁹ and two atoms from the carbon at the
point of attachment is optionally substituted by R¹⁰, a
carbon adjacent to R¹³ and two atoms from the carbon at the
point of attachment is optionally substituted by R¹², and
25 any carbon adjacent to both R¹⁰ and R¹² is optionally
substituted by R¹¹;

30 R⁹, R¹¹, and R¹³ are independently selected from the
group consisting of hydrido, amidino, guanidino, carboxy,
methyl, ethyl, propyl, isopropyl, methoxy, ethoxy,
isopropoxy, propoxy, hydroxy, amino, N-methylamino, N,N-
35 dimethylamino, N-ethylamino, methylthio, ethylthio,
isopropylthio, trifluoromethyl, pentafluoroethyl, 2,2,2-
trifluoroethyl, 2,2,3,3,3-pentafluoropropyl,
trifluoromethoxy, 1,1,2,2-tetrafluoroethoxy, fluoro,
chloro, bromo, methanesulfonamido, amidosulfonyl, N-
methylamidosulfonyl, N,N-dimethylamidosulfonyl,

hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, 2,2,2-trifluoro-1-hydroxyethyl, amidocarbonyl, N-methylamidocarbonyl, N,N-dimethylamidocarbonyl, and cyano;

5 R¹⁰ and R¹² are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, carboxymethyl, methyl, ethyl, propyl, isopropyl, methoxy, ethoxy, isopropoxy, propoxy, hydroxy, amino, methoxyamino, ethoxyamino, acetamido, trifluoroacetamido, aminomethyl, 1-aminoethyl, 2-aminoethyl, N-methylamino, dimethylamino, N-ethylamino, methanesulfonamido, amidosulfonyl, N-methylamidosulfonyl, N,N-dimethylamidosulfonyl, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, 2,2,2-trifluoro-1-hydroxyethyl, methoxycarbonyl, ethoxycarbonyl, amidocarbonyl, N-methylamidocarbonyl, N,N-dimethylamidocarbonyl, N-benzylamidocarbonyl, N-(2-chlorobenzyl)amidocarbonyl, N-(3-fluorobenzyl)amidocarbonyl, N-(2-trifluoromethylbenzyl)amidocarbonyl, N-(1-phenylethyl)amidocarbonyl, N-(1-methyl-1-phenylethyl)amidocarbonyl, N-benzylamidosulfonyl, N-(2-chlorobenzyl)amidosulfonyl, N-ethylamidocarbonyl, N-isopropylamidocarbonyl, N-propylamidocarbonyl, N-isobutylamidocarbonyl, N-(2-butyl)amidocarbonyl, N-25 cyclobutylamidocarbonyl, N-cyclopentylamidocarbonyl, N-cyclohexylamidocarbonyl, fluoro, chloro, bromo, cyano, cyclobutoxy, cyclohexoxy, cyclohexylmethoxy, 4-trifluoromethylcyclohexylmethoxy, cyclopentoxy, benzyl, benzyloxy, 4-bromo-3-fluorophenoxy, 3-bromobenzyloxy, 4-bromobenzyloxy, 4-bromobenzylamino, 5-bromopyrid-2-ylmethylamino, 4-butoxyphenamino, 3-chlorobenzyl, 4-chlorophenoxy, 4-chloro-3-ethylphenoxy, 4-chloro-3-ethylbenzylamino, 4-chloro-3-ethylphenylamino, 3-chlorobenzyloxy, 4-chlorobenzyloxy, 4-chlorobenzylsulfonyl, 4-chlorophenylamino, 4-chlorophenylsulfonyl, 5-chloropyrid-3-yloxy, 2-

cyanopyrid-3-yloxy, 2,3-difluorobenzylloxy, 2,4-difluorobenzylloxy, 3,4-difluorobenzylloxy, 2,5-difluorobenzylloxy, 3,5-difluorophenoxy, 3,5-difluorobenzylloxy, 4-difluoromethoxybenzylloxy, 2,3-difluorophenoxy, 2,4-difluorophenoxy, 2,5-difluorophenoxy, 5-dimethylphenoxy, 3,4-dimethylphenoxy, 3,4-dimethylbenzylloxy, 3,5-dimethylbenzylloxy, 4-ethoxyphenoxy, 4-ethylbenzylloxy, 3-ethylphenoxy, 4-ethylaminophenoxy, 3-ethyl-5-methylphenoxy, 4-fluorobenzylloxy, 2-fluoro-3-trifluoromethylbenzylloxy, 3-fluoro-5-trifluoromethylbenzylloxy, 4-fluoro-2-trifluoromethylbenzylloxy, 4-fluoro-3-trifluoromethylbenzylloxy, 2-fluorophenoxy, 4-fluorophenoxy, 2-fluoro-3-trifluoromethylphenoxy, 2-fluorobenzylloxy, 4-fluorophenylamino, 2-fluoro-4-trifluoromethylphenoxy, 4-isopropylbenzylloxy, 3-isopropylphenoxy, 4-isopropylphenoxy, 4-isopropyl-3-methylphenoxy, 4-isopropylphenoxy, 4-isopropylbenzylloxy, 3-isopropylphenoxy, 4-isopropyl-3-methylphenoxy, phenylamino, 1-phenylethoxy, 2-phenylethoxy, 2-phenylethyl, 2-phenylethylamino, phenylsulfonyl, 3-trifluoromethoxybenzylloxy, 4-trifluoromethoxybenzylloxy, 3-trifluoromethoxyphenoxy, 4-trifluoromethoxyphenoxy, 3-trifluoromethylbenzylloxy, 4-trifluoromethylbenzylloxy, 2,4-bis-trifluoromethylbenzylloxy, 3-trifluoromethylbenzyl, 3,5-bis-trifluoromethylbenzylloxy, 4-trifluoromethylphenoxy, 3-trifluoromethylphenoxy, 3-trifluoromethylthiobenzylloxy, 4-trifluoromethylthiobenzylloxy, 2,3,4-trifluorophenoxy, 2,3,5-trifluorophenoxy, 3-pentafluoroethylphenoxy, 3-(1,1,2,2-tetrafluoroethoxy)phenoxy, and 3-trifluoromethylthiophenoxy;

Y^0 is selected from the group consisting of:

1-Q^b-4-Q^s-2-R¹⁶-3-R¹⁷-5-R¹⁸-6-R¹⁹benzene, 2-Q^b-5-Q^s-6-R¹⁷-4-R¹⁸-3-R¹⁹pyridine, 3-Q^b-6-Q^s-2-R¹⁶-5-R¹⁸-4-R¹⁹pyridine, 2-Q^b-5-Q^s-3-R¹⁶-6-R¹⁸pyrazine, 3-Q^b-6-Q^s-2-R¹⁸-5-R¹⁸-4-R¹⁹pyridazine, 2-

Q^b -5- Q^s -4- R^{17} -6- R^{18} pyrimidine, 5- Q^b -2- Q^s -4- R^{16} -6- R^{19} pyrimidine, 3- Q^b -5- Q^s -4- R^{16} -2- R^{19} thiophene, 2- Q^b -5- Q^s -3- R^{16} -4- R^{17} thiophene, 3- Q^b -5- Q^s -4- R^{16} -2- R^{19} furan, 2- Q^b -5- Q^s -3- R^{16} -4- R^{17} furan, 3- Q^b -5- Q^s -4- R^{16} -2- R^{19} pyrrole, 2- Q^b -5- Q^s -3- R^{16} -4- R^{17} pyrrole, 4- Q^b -2- Q^s -5- R^{19} imidazole, 2- Q^b -4- Q^s -5- R^{17} imidazole, 3- Q^b -5- Q^s -4- R^{16} isoxazole, 5- Q^b -3- Q^s -4- R^{16} isoxazole, 2- Q^b -5- Q^s -4- R^{16} pyrazole, 4- Q^b -2- Q^s -5- R^{19} thiazole, and 2- Q^b -5- Q^s -4- R^{17} thiazole;

R^{17} and R^{18} are independently selected from the group consisting of hydrido, methyl, ethyl, isopropyl, propyl, carboxy, amidino, guanidino, methoxy, ethoxy, isopropoxy, propoxy, hydroxy, amino, aminomethyl, 1-aminoethyl, 2-aminoethyl, N-methylamino, dimethylamino, N-ethylamino, methylthio, ethylthio, isopropylthio, trifluoromethylthio, methylsulfinyl, ethylsulfinyl, methylsulfonyl, ethylsulfonyl, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, 2,2,3,3,3-pentafluoropropyl, trifluoromethoxy, 1,1,2,2-tetrafluoroethoxy, fluoro, chloro, bromo, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, and cyano;

R^{16} and R^{19} are selected from the group consisting of:

(i) hydrido, methyl, ethyl, isopropyl, propyl, carboxy, amidino, guanidino, methoxy, ethoxy, isopropoxy, propoxy, hydroxy, amino, aminomethyl, 1-aminoethyl, 2-aminoethyl, N-methylamino, dimethylamino, N-ethylamino, methylthio, ethylthio, isopropylthio, trifluoromethylthio, methylsulfinyl, ethylsulfinyl, methylsulfonyl, ethylsulfonyl, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, 2,2,3,3,3-pentafluoropropyl, trifluoromethoxy, 1,1,2,2-tetrafluoroethoxy, fluoro, chloro, bromo, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, and cyano; and

(ii) $C(NR^{25})NR^{23}R^{24}$ with the proviso that R^{16} , R^{19} , and Q^b are not simultaneously hydrido;

Q^b is $C(NR^{25})NR^{23}R^{24}$ or hydrido, with the proviso that no more than one of R^{23} and R^{24} is hydroxy at the same

time;

R^{23} , R^{24} , and R^{25} are independently selected from the group consisting of hydrido, methyl, ethyl, and hydroxy;
Q^b is selected from the group consisting of a bond,
5 CH_2 and CH_2CH_2 .

76. The compound of claim 75 or a pharmaceutically acceptable salt thereof, wherein;

M is $N \rightarrow O$;

B is selected from the group consisting of 2-
10 aminophenyl, 3-aminophenyl, 3-amidinophenyl, 4-
amidinophenyl, 3-carboxyphenyl, 3-carboxy-5-
hydroxyphenyl, 3-chlorophenyl, 4-chlorophenyl, 3,4-
dichlorophenyl, 2-fluorophenyl, 3-fluorophenyl, 3,4-
15 difluorophenyl, 3-hydroxyphenyl, 4-hydroxyphenyl, 3-
methoxyaminophenyl, 3-methoxyphenyl, 4-methoxyphenyl, 3-
methylphenyl, 4-methylphenyl, phenyl, 3-
trifluoromethylphenyl, 2-imidazoyl, 2-pyridyl, 3-pyridyl,
5-chloro-3-trifluoromethyl-2-pyridyl, 4-pyridyl, 2-
thienyl, 3-thienyl, and 3-trifluoromethyl-2-pyridyl;

20 A is selected from the group consisting of CH_2 ,
 CH_3CH , CF_3CH , $NHC(O)$, CH_2CH_2 , and $CH_2CH_2CH_2$;

J^a is N or C-X⁰;

J^b is N or C-R¹;

25 R¹ and X⁰ are independently selected from the group
consisting of hydrido, hydroxy, amino, amidino,
hydroxyamino, aminomethyl, methylamino, cyano, methyl,
trifluoromethyl, methoxy, hydroxymethyl, methoxyamino,
methylthio, trifluoromethoxy, fluoro, and chloro;

R² is Z⁰-Q;

30 Z⁰ is selected from the group consisting of a bond,
 CH_2 , O, S, NH, N(CH₃), OCH₂, and SCH₂;

Q is selected from the group consisting of 3-
amidocarbonyl-5-aminophenyl, 3-amino-5-(N-
benzylamidocarbonyl)phenyl, 3-amino-5-benzylphenyl, 3-
35 amino-5-(2-phenylethyl)phenyl, 3-amino-5-

benzylaminophenyl, 3-amino-5-(2-phenylethylamino)phenyl,
3-amino-5-benzylxyphenyl, 3-amino-5-(2-
phenylethoxy)phenyl, 3-amino-5-(N-(2-
chlorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(3-
5 fluorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(2-
trifluoromethylbenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-
(1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-
methyl-1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-
benzylamidosulfonyl)phenyl, 3-amino-5-(N-(2-
10 chlorobenzyl)amidosulfonyl)phenyl, 3-amino-5-(N-
ethylamidocarbonyl)phenyl, 3-amino-5-(N-
isopropylamidocarbonyl)phenyl, 3-amino-5-(N-
propylamidocarbonyl)phenyl, 3-amino-5-(N-
isobutylamidocarbonyl)phenyl, 3-amino-5-(N-(2-
15 butyl)amidocarbonyl)phenyl, 3-amino-5-(N-
cyclobutylamidocarbonyl)phenyl, 3-amino-5-(N-
cyclopentylamidocarbonyl)phenyl, 3-amino-5-(N-
cyclohexylamidocarbonyl)phenyl, 5-amino-2-fluorophenyl,
3-amino-5-hydroxymethylphenyl, 5-amino-3-
20 methoxycarbonylphenyl, 3-amidinophenyl, 3-amino-2-
methylphenyl, 5-amino-2-methylthiophenyl, 3-aminophenyl,
3-amino-5-(4-trifluoromethylbenzylamino)phenyl, 3-amino-
5-(4-trifluoromethylbenzyloxy)phenyl, 3-carboxyphenyl, 3-
carboxy-5-hydroxyphenyl, 3-amino-5-carboxyphenyl, 3-
25 chlorophenyl, 2-chlorophenyl, 3-cyanophenyl, 3,5-
diaminophenyl, 3-dimethylaminophenyl, 2-fluorophenyl, 3-
fluorophenyl, 2-hydroxyphenyl, 3-hydroxyphenyl, 3-
methanesulfonylaminophenyl, 2-methoxyphenyl, 3-
methoxyphenyl, 3-methoxyaminophenyl, 3-
30 methoxycarbonylphenyl, 2-methylaminophenyl, 3-
methylaminophenyl, 2-methylphenyl, 3-methylphenyl, 4-
methylphenyl, phenyl, 3-trifluoroacetamidophenyl, 3-
trifluoromethylphenyl, 2-trifluoromethylphenyl, 5-amino-
2-thienyl, 5-amino-3-thienyl, 3-bromo-2-thienyl, 3-
35 pyridyl, 4-pyridyl, 2-thienyl, and 3-thienyl;

Y^0 is selected from the group consisting of 1-Q^b-4-Q^s-

2-R¹⁶-3-R¹⁷-5-R¹⁸-6-R¹⁹benzene, 2-Q^b-5-Q^s-6-R¹⁷-4-R¹⁸-3-R¹⁹pyridine, 3-Q^b-6-Q^s-2-R¹⁶-5-R¹⁸-4-R¹⁹pyridine, 3-Q^b-5-Q^s-4-R¹⁶-2-R¹⁹thiophene, and 2-Q^b-5-Q^s-3-R¹⁶-4-R¹⁷thiophene;

R¹⁶ and R¹⁹ are selected from the group consisting of:

5 (i) hydrido, amidino, amino, aminomethyl, methoxy, methylamino, hydroxy, hydroxymethyl, fluoro, chloro, and cyano; and

(ii) C(NR²⁵)NR²³R²⁴ with the proviso that R¹⁶, R¹⁹, and Q^b are not simultaneously hydrido;

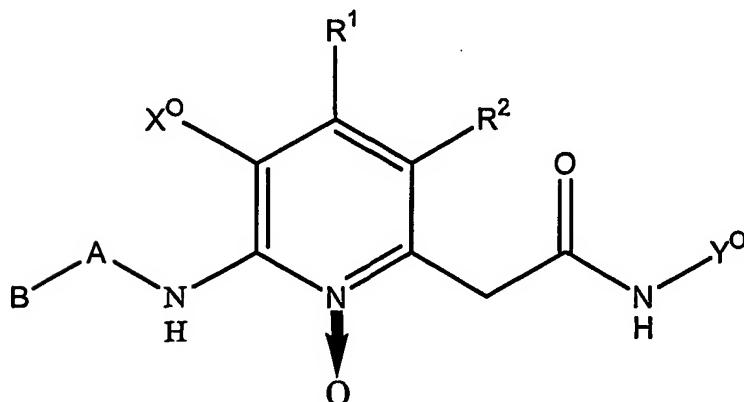
10 R¹⁷ and R¹⁸ are independently selected from the group consisting of hydrido, fluoro, chloro, hydroxy, hydroxymethyl, amino, carboxy, and cyano;

Q^b is C(NR²⁵)NR²³R²⁴ or hydrido;

R²³, R²⁴, and R²⁵ are independently hydrido or methyl;

15 Q^s is CH₂.

77. The compound of claim 74 having the structure:



or a pharmaceutically acceptable salt thereof, wherein;

B is phenyl or a heteroaryl of 5 or 6 ring members, wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to A is optionally substituted by R³², the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R³⁶, a carbon adjacent to R³² and two atoms from the carbon at the point of attachment is optionally substituted by R³³, a carbon adjacent to R³⁶ and two atoms

from the carbon at the point of attachment is optionally substituted by R³⁵, and any carbon adjacent to both R³³ and R³⁵ is optionally substituted by R³⁴;

R³², R³³, R³⁴, R³⁵, and R³⁶ are independently selected from the group consisting of hydrido, acetamido, haloacetamido, amidino, guanidino, alkoxy, hydroxy, amino, alkoxyamino, alkylamino, alkylthio, amidosulfonyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, carboalkoxy, carboxy, carboxamido, cyano, and Q^b;

A is a bond or (CH(R¹⁵))_{pa}-(W⁷)_{rr} wherein rr is 0 or 1, pa is an integer selected from 0 through 3, and W⁷ is N(R⁷);

R⁷ is hydrido or alkyl;

R¹⁵ is selected from the group consisting of hydrido, halo, alkyl, and haloalkyl;

R¹ and X^o are independently selected from the group consisting of hydrido, hydroxy, hydroxyamino, amidino, amino, cyano, hydroxyalkyl, alkoxy, alkyl, alkylamino, aminoalkyl, alkylthio, alkoxyamino, haloalkyl, haloalkoxy, and halo;

R² is Z⁰-Q;

Z⁰ is a bond;

Q is phenyl or a heteroaryl of 5 or 6 ring members, wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to Z⁰ is optionally substituted by R⁹, the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R¹³, a carbon adjacent to R⁹ and two atoms from the carbon at the point of attachment is optionally substituted by R¹⁰, a carbon adjacent to R¹³ and two atoms from the carbon at the point of attachment is optionally substituted by R¹², and any carbon adjacent to both R¹⁰ and R¹² is optionally substituted by R¹¹;

R⁹, R¹¹, and R¹³ are independently selected from the group consisting of hydrido, hydroxy, amino, amidino,

guanidino, alkylamino, alkylthio, alkoxy, alkylsulfinyl, alkylsulfonyl, amidosulfonyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, carboxy, carboxamido, and cyano;

5 R¹⁰ and R¹² are independently selected from the group consisting of hydrido, acetamido, haloacetamido, amidino, guanidino, alkyl, alkoxy, alkoxyamino, hydroxy, amino, alkylamino, alkylsulfonamido, amidosulfonyl, hydroxyalkyl, aminoalkyl, halo, haloalkyl, carboalkoxy, carboxy, carboxamido, carboxyalkyl, and cyano;

10 Y⁰ is phenyl or a heteroaryl of 5 or 6 ring members, wherein one carbon of said phenyl or said heteroaryl is substituted by Q^a, a carbon two or three atoms from the point of attachment of Q^a to said phenyl or said heteroaryl is substituted by Q^b, a carbon adjacent to the point of attachment of Q^a is optionally substituted by R¹⁷, another carbon adjacent to the point of attachment of Q^a is optionally substituted by R¹⁸, a carbon adjacent to Q^b is optionally substituted by R¹⁶, and another carbon adjacent to Q^b is optionally substituted by R¹⁹;

15 R¹⁷ and R¹⁸ are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, haloalkylthio, alkoxy, hydroxy, amino, alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano;

20 R¹⁶ and R¹⁹ are selected from the group consisting of:
(i) hydrido, amidino, guanidino, carboxy, haloalkylthio, alkoxy, hydroxy, amino, alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano; and

25 (ii) NR²⁰R²¹ or C(NR²⁵)NR²³R²⁴, with the proviso that R¹⁶, R¹⁹, and Q^b are not simultaneously hydrido;

30 Q^b is selected from the group consisting of NR²⁰R²¹, hydrido, and C(NR²⁵)NR²³R²⁴;

R^{20} , R^{21} , R^{23} , R^{24} , and R^{25} are independently hydrido or alkyl;

Q^8 is CH_2 .

78. The compound of claim 77 or a pharmaceutically acceptable salt thereof, wherein;

B is selected from the group consisting of phenyl, 2-thienyl, 3-thienyl, 2-furyl, 3-furyl, 2-pyrrolyl, 3-pyrrolyl, 2-imidazolyl, 4-imidazolyl, 3-pyrazolyl, 4-pyrazolyl, 2-thiazolyl, 3-isoxazolyl, and 5-isoxazolyl, wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to A is optionally substituted by R^{32} , the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R^{36} , a carbon adjacent to R^{32} and two atoms from the carbon at the point of attachment is optionally substituted by R^{33} , a carbon adjacent to R^{36} and two atoms from the carbon at the point of attachment is optionally substituted by R^{35} , and any carbon adjacent to both R^{33} and R^{35} is optionally substituted by R^{34} ;

R^{32} , R^{33} , R^{34} , R^{35} , and R^{36} are independently selected from the group consisting of hydrido, amidino, guanidino, methyl, ethyl, methoxy, ethoxy, hydroxy, amino, N-methylamino, dimethylamino, methoxyamino, methylthio, ethylthio, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, fluoro, chloro, bromo, amidosulfonyl, N-methylamidosulfonyl, hydroxymethyl, amidocarbonyl, carboxy, cyano, and Q^b ;

A is selected from the group consisting of a bond, NH, $N(CH_3)$, CH_2 , CH_3CH , and CH_2CH_2 ;

X^o is selected from the group consisting of hydrido, hydroxy, amino, amidino, aminomethyl, cyano, methyl, trifluoromethyl, hydroxymethyl, chloro, and fluoro;

R^1 is selected from the group consisting of hydrido, hydroxy, hydroxymethyl, amino, aminomethyl, methylamino, cyano, methyl, trifluoromethyl, methoxy, methylthio,

trifluoromethoxy, fluoro, and chloro;

R² is selected from the group consisting of phenyl, 2-thienyl, 2-furyl, 2-pyrrolyl, 2-imidazolyl, 2-thiazolyl, 3-isoxazolyl, 2-pyridyl, and 3-pyridyl, wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to the pyridine ring is optionally substituted by R⁹, the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R¹³, a carbon adjacent to R⁹ and two atoms from the carbon at the point of attachment is optionally substituted by R¹⁰, a carbon adjacent to R¹³ and two atoms from the carbon at the point of attachment is optionally substituted by R¹², and any carbon adjacent to both R¹⁰ and R¹² is optionally substituted by R¹¹;

R⁹, R¹¹, and R¹³ are independently selected from the group consisting of hydrido, methyl, ethyl, methoxy, ethoxy, hydroxy, amino, N-methylamino, N,N-dimethylamino, methylthio, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, fluoro, chloro, bromo, amidosulfonyl, N-methylamidosulfonyl, N,N-dimethylamidosulfonyl, hydroxymethyl, 1-hydroxyethyl, amidocarbonyl, N-methylamidocarbonyl, carboxy, and cyano;

R¹⁰ and R¹² are independently selected from the group consisting of hydrido, amidino, amidocarbonyl, N-methylamidocarbonyl, N-benzylamidocarbonyl, N-(2-chlorobenzyl)amidocarbonyl, N-(3-fluorobenzyl)amidocarbonyl, N-(2-trifluoromethylbenzyl)amidocarbonyl, N-(1-phenylethyl)amidocarbonyl, N-(1-methyl-1-phenylethyl)amidocarbonyl, N-benzylamidosulfonyl, N-(2-chlorobenzyl)amidosulfonyl, N-ethylamidocarbonyl, N-isopropylamidocarbonyl, N-propylamidocarbonyl, N-isobutylamidocarbonyl, N-(2-butyl)amidocarbonyl, N-cyclobutylamidocarbonyl, N-cyclopentylamidocarbonyl, N-cyclohexylamidocarbonyl, guanidino, methyl, ethyl, methoxy, ethoxy, hydroxy, hydroxymethyl, 1-hydroxyethyl,

2-hydroxyethyl, carboxy, carboxymethyl, amino, acetamido, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, trifluoroacetamido, aminomethyl, N-methylamino, dimethylamino, methoxyamino, amidosulfonyl, N-methylamidosulfonyl, N,N-dimethylamidosulfonyl, methanesulfonamido, methoxycarbonyl, fluoro, chloro, bromo, and cyano;

5 Y^0 is selected from the group consisting of:

10 1- Q^b -4- Q^s -2- R^{16} -3- R^{17} -5- R^{18} -6- R^{19} benzene, 2- Q^b -5- Q^s -6- R^{17} -4- R^{18} -3- R^{19} pyridine, 2- Q^b -5- Q^s -3- R^{16} -4- R^{17} thiophene, 3- Q^b -6- Q^s -2- R^{16} -5- R^{18} -4- R^{19} pyridine, 3- Q^b -5- Q^s -4- R^{16} -2- R^{19} thiophene, 3- Q^b -5- Q^s -4- R^{16} -2- R^{19} furan, 2- Q^b -5- Q^s -3- R^{16} -4- R^{17} furan, 3- Q^b -5- Q^s -4- R^{16} -2- R^{19} pyrrole, 2- Q^b -5- Q^s -3- R^{16} -4- R^{17} pyrrole, 4- Q^b -2- Q^s -5- R^{19} thiazole, and 2- Q^b -5- Q^s -4- R^{17} thiazole;

15 R^{16} , R^{17} , R^{18} , and R^{19} are independently selected from the group consisting of hydrido, methyl, ethyl, amidino, guanidino, methoxy, hydroxy, amino, aminomethyl, 1-aminoethyl, 2-aminoethyl, N-methylamino, dimethylamino, methylthio, ethylthio, trifluoromethylthio, methylsulfinyl, methylsulfonyl, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, trifluoromethoxy, fluoro, chloro, hydroxymethyl, carboxy, and cyano;

20 Q^b is $NR^{20}R^{21}$ or $C(NR^{25})NR^{23}R^{24}$;

25 R^{20} , R^{21} , R^{23} , R^{24} , and R^{25} are independently selected from the group consisting of hydrido, methyl, and ethyl; Q^s is CH_2 .

79. The compound of claim 78 or a pharmaceutically acceptable salt thereof, wherein;

30 B is selected from the group consisting of 2-aminophenyl, 3-aminophenyl, 3-amidinophenyl, 4-amidinophenyl, 3-carboxyphenyl, 3-carboxy-5-hydroxyphenyl, 3-chlorophenyl, 4-chlorophenyl, 3,4-dichlorophenyl, 2-fluorophenyl, 3-fluorophenyl, 3,4-difluorophenyl, 3-hydroxyphenyl, 4-hydroxyphenyl, 3-methoxyaminophenyl, 3-methoxyphenyl, 4-methoxyphenyl, 3-

methylphenyl, 4-methylphenyl, phenyl, 3-trifluoromethylphenyl, 2-imidazoyl, 2-pyridyl, 3-pyridyl, 5-chloro-3-trifluoromethyl-2-pyridyl, 4-pyridyl, 2-thienyl, 3-thienyl, and 3-trifluoromethyl-2-pyridyl;

5 A is CH₂ or CH₂CH₂;

X° is selected from the group consisting of hydrido, hydroxy, amino, amidino, aminomethyl, cyano, methyl, trifluoromethyl, hydroxymethyl, and fluoro;

10 R¹ is selected from the group consisting of hydrido, hydroxy, hydroxymethyl, amino, aminomethyl, cyano, methyl, trifluoromethyl, and fluoro;

15 R² is selected from the group consisting of 3-amidocarbonyl-5-aminophenyl, 3-amidocarbonyl-5-aminophenyl, 3-amino-5-(N-benzylamidocarbonyl)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(3-fluorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-methyl-1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-benzylamidosulfonyl)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, 3-amino-5-(N-ethylamidocarbonyl)phenyl, 3-amino-5-(N-isopropylamidocarbonyl)phenyl, 3-amino-5-(N-propylamidocarbonyl)phenyl, 3-amino-5-(N-isobutylamidocarbonyl)phenyl, 3-amino-5-(N-(2-butyl)amidocarbonyl)phenyl, 3-amino-5-(N-cyclobutylamidocarbonyl)phenyl, 3-amino-5-(N-cyclopentylamidocarbonyl)phenyl, 3-amino-5-(N-cyclohexylamidocarbonyl)phenyl, 5-amino-2-fluorophenyl, 30 3-amino-5-hydroxymethylphenyl, 5-amino-3-methoxycarbonylphenyl, 3-amidinophenyl, 3-amino-2-methylphenyl, 5-amino-2-methylthiophenyl, 3-aminophenyl, 3-carboxyphenyl, 3-carboxy-5-aminophenyl, 3-carboxy-5-hydroxyphenyl, 3-carboxymethyl-5-aminophenyl, 3-carboxymethyl-5-hydroxyphenyl, 3-carboxymethylphenyl, 3-chlorophenyl, 2-chlorophenyl, 3-cyanophenyl, 3,5-

diaminophenyl, 3-dimethylaminophenyl, 2-fluorophenyl, 3-fluorophenyl, 2,5-difluorophenyl, 2-hydroxyphenyl, 3-hydroxyphenyl, 3-methanesulfonylaminophenyl, 2-methoxyphenyl, 3-methoxyphenyl, 3-methoxyaminophenyl, 3-methoxycarbonylphenyl, 2-methylaminophenyl, 3-methylaminophenyl, 2-methylphenyl, 3-methylphenyl, 4-methylphenyl, phenyl, 3-trifluoroacetamidophenyl, 3-trifluoromethylphenyl, 2-trifluoromethylphenyl, 5-amino-2-thienyl, 5-amino-3-thienyl, 3-bromo-2-thienyl, 3-pyridyl, 4-pyridyl, 2-thienyl, and 3-thienyl;

Y⁰ is selected from the group consisting of:

1-Q^b-4-Q^s-2-R¹⁶-3-R¹⁷-5-R¹⁸-6-R¹⁹benzene, 2-Q^b-5-Q^s-6-R¹⁷-4-R¹⁸-3-R¹⁹pyridine, 3-Q^b-6-Q^s-2-R¹⁶-5-R¹⁸-4-R¹⁹pyridine, 3-Q^b-5-Q^s-4-R¹⁶-2-R¹⁹thiophene, and 2-Q^b-5-Q^s-3-R¹⁶-4-R¹⁷thiophene;

R¹⁶ and R¹⁹ are independently selected from the group consisting of hydrido, amidino, amino, aminomethyl, methoxy, methylamino, hydroxy, hydroxymethyl, fluoro, chloro, and cyano;

R¹⁷ and R¹⁸ are independently selected from the group consisting of hydrido, fluoro, chloro, hydroxy, hydroxymethyl, amino, carboxy, and cyano;

Q^b is C(NR²⁵)NR²³R²⁴;

R²³, R²⁴, and R²⁵ are independently hydrido or methyl;

Q^s is CH₂.

80. The compound of claim 79 or a pharmaceutically acceptable salt thereof, wherein;

B is selected from the group consisting of 3-aminophenyl, 3-amidinophenyl, 4-amidinophenyl, 3-chlorophenyl, 4-chlorophenyl, 3,4-dichlorophenyl, 2-fluorophenyl, 4-methylphenyl, phenyl, 2-imidazoyl, 3-pyridyl, 4-pyridyl, and 3-trifluoromethyl-2-pyridyl;

A is CH₂ or CH₂CH₂;

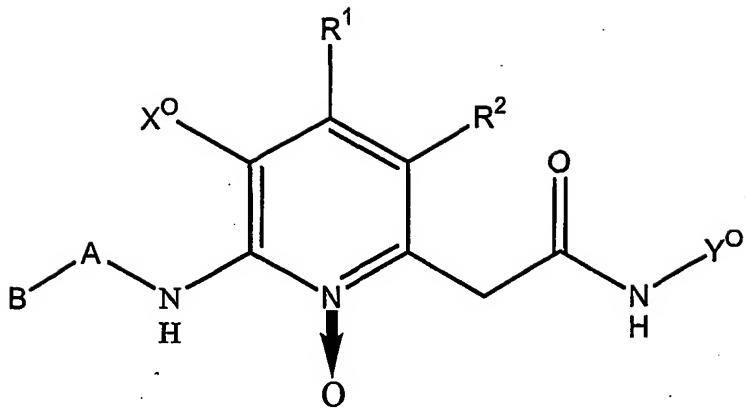
X⁰ is selected from the group consisting of hydrido, hydroxy, amino, amidino, aminomethyl, cyano, methyl, trifluoromethyl, hydroxymethyl, and fluoro;

R¹ is selected from the group consisting of hydrido, hydroxy, hydroxymethyl, amino, aminomethyl, cyano, methyl, trifluoromethyl, and fluoro;

R² is selected from the group consisting of 3-amidocarbonyl-5-aminophenyl, 3-amino-5-(N-benzylamidocarbonyl)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(3-fluorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-methyl-1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-benzylamidosulfonyl)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, 3-amino-5-(N-ethylamidocarbonyl)phenyl, 3-amino-5-(N-isopropylamidocarbonyl)phenyl, 3-amino-5-(N-propylamidocarbonyl)phenyl, 3-amino-5-(N-isobutylamidocarbonyl)phenyl, 3-amino-5-(N-(2-butyl)amidocarbonyl)phenyl, 3-amino-5-(N-cyclobutylamidocarbonyl)phenyl, 3-amino-5-(N-cyclopentylamidocarbonyl)phenyl, 3-amino-5-(N-cyclohexylamidocarbonyl)phenyl, 3-aminophenyl, 3-carboxy-5-aminophenyl, 3-chlorophenyl, 3,5-diaminophenyl, 3-dimethylaminophenyl, 3-hydroxyphenyl, 3-methanesulfonylaminophenyl, 3-methylaminophenyl, 2-methylphenyl, 3-methylphenyl, phenyl, 3-trifluoroacetamidophenyl, 3-bromo-2-thienyl, 2-thienyl, and 3-thienyl;

Y⁰ is selected from the group consisting of 5-amidino-2-thienylmethyl, 4-amidinobenzyl, 2-fluoro-4-amidinobenzyl, and 3-fluoro-4-amidinobenzyl.

81. The compound of claim 74 having the structure:



or a pharmaceutically acceptable salt thereof, wherein;

R² is 3-aminophenyl, B is phenyl, A is CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-aminophenyl, B is 3-chlorophenyl, A is CH₂CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-aminophenyl, B is phenyl, A is CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is hydrido;

R² is 3-aminophenyl, B is 2-imidazoyl, A is CH₂CH₂CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amidocarbonyl-5-aminophenyl, B is 3-chlorophenyl, A is CH₂CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is 3-chlorophenyl, A is CH₂CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-(2-chlorobenzyl)amidocarbonyl)phenyl, B is 3-chlorophenyl, A is CH₂CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, B is 3-chlorophenyl, A is CH₂CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)-phenyl, B is 3-chlorophenyl, A is CH₂CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3,5-diaminophenyl, B is 3-chlorophenyl, A is CH₂CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-carboxyphenyl, B is 3-chlorophenyl, A is CH₂CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

5 R² is 3-amidocarbonyl-5-aminophenyl, B is 3-chlorophenyl, A is CH₂CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is hydrido;

10 R² is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is 3-chlorophenyl, A is CH₂CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is hydrido;

R² is 3-amino-5-(N-(2-chlorobenzyl)amidocarbonyl)phenyl, B is 3-chlorophenyl, A is CH₂CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is hydrido;

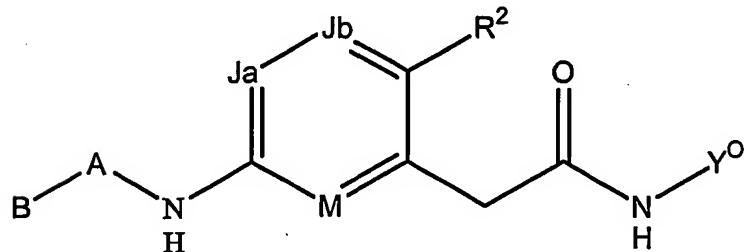
15 R² is 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, B is 3-chlorophenyl, A is CH₂CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is hydrido;

20 R² is 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)- phenyl, B is 3-chlorophenyl, A is CH₂CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is hydrido;

R² is 3,5-diaminophenyl, B is 3-chlorophenyl, A is CH₂CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is hydrido;

R² is 3-amino-5-carboxyphenyl, B is 3-chlorophenyl, A is CH₂CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is hydrido.

25 82. The compound of claim 67 having the structure:



or a pharmaceutically acceptable salt thereof, wherein;

M is N or N→O;

B is selected from the group consisting of hydrido, C2-C8 alkyl, C3-C8 alkenyl, C3-C8 alkynyl, and C2-C8 haloalkyl, wherein each member of group B is optionally substituted at any carbon up to and including 6 atoms
5 from the point of attachment of B to A with one or more of the group consisting of R³², R³³, R³⁴, R³⁵, and R³⁶;

R³², R³³, R³⁴, R³⁵, and R³⁶ are independently selected from the group consisting of hydrido, acetamido, haloacetamido, amidino, guanidino, alkoxy, hydroxy, 10 amino, alkoxyamino, alkylamino, alkylthio, amidosulfonyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, hydroxyhaloalkyl, carboalkoxy, carboxy, carboxamido, cyano, and Q^b;

A is a bond or (CH(R¹⁵))_{pa}-(W⁷)_{rr} wherein rr is 0 or 1, 15 pa is an integer selected from 0 through 3, and W⁷ is (R⁷)NC(O) or N(R⁷);

R⁷ is selected from the group consisting of hydrido, hydroxy and alkyl;

R¹⁵ is selected from the group consisting of hydrido, halo, alkyl, and haloalkyl;
20

J_a is N or C-X⁰;

J_b is N or C-R¹;

R¹ and X⁰ are independently selected from the group consisting of hydrido, hydroxy, hydroxyamino, amidino, 25 amino, cyano, hydroxyalkyl, alkoxy, alkyl, alkylamino, aminoalkyl, alkylthio, alkoxyamino, haloalkyl, haloalkoxy, and halo;

R² is Z⁰-Q;

Z⁰ is selected from the group consisting of a bond, CH₂, CH₂CH₂, W⁰-(CH(R⁴²))_p wherein p is 0 or 1 and W⁰ is selected from the group consisting of O, S, and N(R⁴¹);
30

R⁴¹ and R⁴² are independently hydrido or alkyl;

Q is phenyl or a heteroaryl of 5 or 6 ring members, wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to Z⁰ is 35 optionally substituted by R⁹, the other carbon adjacent to

the carbon at the point of attachment is optionally substituted by R¹³, a carbon adjacent to R⁹ and two atoms from the carbon at the point of attachment is optionally substituted by R¹⁰, a carbon adjacent to R¹³ and two atoms from the carbon at the point of attachment is optionally substituted by R¹², and any carbon adjacent to both R¹⁰ and R¹² is optionally substituted by R¹¹;

R⁹, R¹¹, and R¹³ are independently selected from the group consisting of hydrido, hydroxy, amino, amidino, guanidino, alkylamino, alkylthio, alkylsulfonamido, alkylsulfinyl, alkylsulfonyl, amidosulfonyl, alkyl, alkoxy, halo, haloalkyl, haloalkoxy, hydroxyalkyl, hydroxyhaloalkyl, carboxy, carboxamido, and cyano;

R¹⁰ and R¹² are independently selected from the group consisting of hydrido, acetamido, haloacetamido, amidino, guanidino, alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heterocyclyl, alkoxy, cycloalkoxy, cycloalkylalkoxy, aralkoxy, aryloxy, heteroaryloxy, heteroaralkoxy, heterocyclxyoxy, heterocyclylalkoxy, hydroxy, amino, alkoxyamino, alkylamino, arylamino, aralkylamino, heteroarylamin, heteroaralkylamino, heterocyclylamino, heterocyclylalkylamino, alkylsulfonamido, amidosulfonyl, arylsulfinyl, aralkylsulfinyl, cycloalkylsulfinyl, heteroarylsulfinyl, arylsulfonyl, aralkylsulfonyl, cycloalkylsulfonyl, heteroarylsulfonyl, hydroxyalkyl, hydroxyhaloalkyl, aminoalkyl, carboalkoxy, carboxy, carboxyalkyl, carboxamido, halo, haloalkyl, and cyano;

y⁰ is phenyl or a heteroaryl of 5 or 6 ring members, wherein one carbon of said phenyl or said heteroaryl is substituted by Q^a, a carbon two or three atoms from the point of attachment of Q^a to said phenyl or said heteroaryl is substituted by Q^b, a carbon adjacent to the point of attachment of Q^a is optionally substituted by R¹⁷, another carbon adjacent to the point of attachment of Q^a is optionally substituted by R¹⁸, a carbon adjacent to Q^b

is optionally substituted by R¹⁶, and another carbon adjacent to Q^b is optionally substituted by R¹⁹;

R¹⁷ and R¹⁸ are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, haloalkylthio, alkoxy, hydroxy, amino, alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano;

R¹⁶ or R¹⁹ are selected from the group consisting of:

(i) hydrido, amidino, guanidino, carboxy, haloalkylthio, alkoxy, hydroxy, amino, alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano; and

(ii) NR²⁰R²¹, N(R²⁶)C(NR²⁵)N(R²³)(R²⁴), and C(NR²⁵)NR²³R²⁴, with the proviso that R¹⁶, R¹⁹, and Q^b are not simultaneously hydrido;

Q^b is selected from the group consisting of NR²⁰R²¹, hydrido, C(NR²⁵)NR²³R²⁴, and N(R²⁶)C(NR²⁵)N(R²³)(R²⁴), with the proviso that no more than one of R²⁰ and R²¹ is hydroxy at the same time and with the further proviso that no more than one of R²³ and R²⁴ is hydroxy at the same time;

R²⁰, R²¹, R²³, R²⁴, R²⁵, and R²⁶ are independently selected from the group consisting of hydrido, alkyl, and hydroxy;

Q^s is selected from the group consisting of a bond, CH₂, and CH₂CH₂.

83. The compound of claim 82 or a pharmaceutically acceptable salt thereof, wherein;

M is N or N→O;

B is selected from the group consisting of hydrido, ethyl, 2-propynyl,

2-propenyl, propyl, isopropyl, butyl, 2-butenyl, 3-butenyl, 2-butynyl, sec-butyl, tert-butyl, isobutyl, 2-methylpropenyl, 1-pentyl, 2-pentenyl, 3-pentenyl, 4-

pentenyl, 2-pentynyl, 3-pentynyl, 2-pentyl, 1-methyl-2-butenyl, 1-methyl-3-butenyl, 1-methyl-2-butynyl, 3-pentyl, 1-ethyl-2-propenyl, 2-methylbutyl, 2-methyl-2-butenyl, 2-methyl-3-butenyl, 2-methyl-3-butynyl, 3-methylbutyl, 3-methyl-2-butenyl, 3-methyl-3-butenyl, 1-hexyl, 2-hexenyl, 3-hexenyl, 4-hexenyl, 5-hexenyl, 2-hexynyl, 3-hexynyl, 4-hexynyl, 2-hexyl, 1-methyl-2-pentenyl, 1-methyl-3-pentenyl, 1-methyl-4-pentenyl, 1-methyl-2-pentynyl, 1-methyl-3-pentynyl, 3-hexyl, 1-ethyl-2-butenyl, 1-ethyl-3-butenyl, 1-propyl-2-propenyl, 1-ethyl-2-butynyl, 1-heptyl, 2-heptenyl, 3-heptenyl, 4-heptenyl, 5-heptenyl, 6-heptenyl, 2-heptynyl, 3-heptynyl, 4-heptynyl, 5-heptynyl, 2-heptyl, 1-methyl-2-hexenyl, 1-methyl-3-hexenyl, 1-methyl-4-hexenyl, 1-methyl-5-hexenyl, 1-methyl-2-hexynyl, 1-methyl-3-hexynyl, 1-methyl-4-hexynyl, 3-heptyl, 1-ethyl-2-pentenyl, 1-ethyl-3-pentenyl, 1-ethyl-4-pentenyl, 1-butyl-2-propenyl, 1-ethyl-2-pentynyl, 1-ethyl-3-pentynyl, 2,2,2-trifluoroethyl, 2,2-difluoropropyl, 4-trifluoromethyl-5,5,5-trifluoropentyl, 4-trifluoromethylpentyl, 5,5,6,6,6-pentafluorohexyl, and 3,3,3-trifluoropropyl, wherein each member of group B is optionally substituted at any carbon up to and including 5 atoms from the point of attachment of B to A with one or more of the group consisting of R³², R³³, R³⁴, R³⁵, and R³⁶;

R³², R³³, R³⁴, R³⁵, and R³⁶ are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, methoxy, ethoxy, isopropoxy, propoxy, hydroxy, amino, methoxyamino, ethoxyamino, acetamido, trifluoroacetamido, N-methylamino, dimethylamino, N-ethylamino, methylthio, ethylthio, isopropylthio, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, 2,2,3,3,3-pentafluoropropyl, trifluoromethoxy, 1,1,2,2-tetrafluoroethoxy, fluoro, chloro, bromo, amidosulfonyl, N-methylamidosulfonyl, N,N-dimethylamidosulfonyl, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, 2,2,2-

trifluoro-1-hydroxyethyl, methoxycarbonyl, ethoxycarbonyl, amidocarbonyl, N-methylamidocarbonyl, N,N-dimethylamidocarbonyl, cyano, and Q^b;

A is selected from the group consisting of bond, NH,
5 N(CH₃), N(OH), CH₂, CH₃CH, CF₃CH, NHC(O), N(CH₃)C(O), C(O)NH, C(O)N(CH₃), CH₂CH₂, CH₂CH₂CH₂, CH₃CHCH₂, and CF₃CHCH₂;

J^a is N or C-X⁰;

J^b is N or C-R¹;

10 R¹ and X⁰ are independently selected from the group consisting of hydrido, hydroxy, amino, amidino, hydroxyamino, aminomethyl, 1-aminoethyl, methylamino, dimethylamino, cyano, methyl, ethyl, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, methoxy, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl,
15 methoxyamino, methylthio, ethylthio, trifluoromethoxy, 1,1,2,2-tetrafluoroethoxy, fluoro, chloro, and bromo;

R² is Z⁰-Q;

20 Z⁰ is selected from the group consisting of a bond, CH₂, CH₂CH₂, O, S, NH, N(CH₃), OCH₂, SCH₂, N(H)CH₂, and N(CH₃)CH₂;

25 Q is selected from the group consisting of phenyl, 2-thienyl, 3-thienyl, 2-furyl, 3-furyl, 2-pyrrolyl, 3-pyrrolyl, 2-imidazolyl, 4-imidazolyl, 3-pyrazolyl, 4-pyrazolyl, 2-thiazolyl, 3-isoxazolyl, 5-isoxazolyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, 2-pyrazinyl, 2-pyrimidinyl, 4-pyrimidinyl, 5-pyrimidinyl, 3-pyridazinyl, 4-pyridazinyl, and 1,3,5-triazin-2-yl, wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to Z⁰ is optionally substituted by R⁹, the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R¹³, a carbon adjacent to R⁹ and two atoms from the carbon at the point of attachment is optionally substituted by R¹⁰, a carbon adjacent to R¹³ and two atoms from the carbon at the point of attachment is optionally substituted by R¹², and
30
35

any carbon adjacent to both R¹⁰ and R¹² is optionally substituted by R¹¹;

R⁹, R¹¹, and R¹³ are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, methyl, ethyl, propyl, isopropyl, methoxy, ethoxy, isopropoxy, propoxy, hydroxy, amino, N-methylamino, N,N-dimethylamino, N-ethylamino, methylthio, ethylthio, isopropylthio, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, 2,2,3,3,3-pentafluoropropyl, trifluoromethoxy, 1,1,2,2-tetrafluoroethoxy, fluoro, chloro, bromo, methanesulfonamido, amidosulfonyl, N-methylamidosulfonyl, N,N-dimethylamidosulfonyl, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, 2,2,2-trifluoro-1-hydroxyethyl, amidocarbonyl, N-methylamidocarbonyl, N,N-dimethylamidocarbonyl, and cyano;

R¹⁰ and R¹² are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, carboxymethyl, methyl, ethyl, propyl, isopropyl, methoxy, ethoxy, isopropoxy, propoxy, hydroxy, amino, methoxyamino, ethoxyamino, acetamido, trifluoroacetamido, aminomethyl, 1-aminoethyl, 2-aminoethyl, N-methylamino, dimethylamino, N-ethylamino, methanesulfonamido, amidosulfonyl, N-methylamidosulfonyl, N,N-dimethylamidosulfonyl, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, 2,2,2-trifluoro-1-hydroxyethyl, methoxycarbonyl, ethoxycarbonyl, amidocarbonyl, N-methylamidocarbonyl, N,N-dimethylamidocarbonyl, N-benzylamidocarbonyl, N-(2-chlorobenzyl)amidocarbonyl, N-(3-fluorobenzyl)amidocarbonyl, N-(2-trifluoromethylbenzyl)amidocarbonyl, N-(1-phenylethyl)amidocarbonyl, N-(1-methyl-1-phenylethyl)amidocarbonyl, N-benzylamidosulfonyl, N-(2-chlorobenzyl)amidosulfonyl, N-ethylamidocarbonyl, N-isopropylamidocarbonyl, N-propylamidocarbonyl, N-isobutylamidocarbonyl, N-(2-butyl)amidocarbonyl, N-

cyclobutylamidocarbonyl, N-cyclopentylamidocarbonyl, N-
cyclohexylamidocarbonyl, fluoro, chloro, bromo, cyano,
cyclobutoxy, cyclohexoxy, cyclohexylmethoxy, 4-
trifluoromethylcyclohexylmethoxy, cyclopentoxy, benzyl,
5
benzyloxy, 4-bromo-3-fluorophenoxy, 3-bromobenzylloxy, 4-
bromobenzylloxy, 4-bromobenzylamino, 5-bromopyrid-2-
ylmethylamino, 4-butoxyphenamino, 3-chlorobenzyl, 4-
chlorophenoxy, 4-chloro-3-ethylphenoxy, 4-chloro-3-
ethylbenzylamino, 4-chloro-3-ethylphenylamino, 3-
10
chlorobenzylloxy, 4-chlorobenzylloxy, 4-
chlorobenzylsulfonyl, 4-chlorophenylamino, 4-
chlorophenylsulfonyl, 5-chloropyrid-3-yloxy, 2-
cyanopyrid-3-yloxy, 2,3-difluorobenzylloxy, 2,4-
difluorobenzylloxy, 3,4-difluorobenzylloxy, 2,5-
15
difluorobenzylloxy, 3,5-difluorophenoxy, 3,5-
difluorobenzylloxy, 4-difluoromethoxybenzylloxy, 2,3-
difluorophenoxy, 2,4-difluorophenoxy, 2,5-
difluorophenoxy, 3,5-dimethylphenoxy, 3,4-
dimethylphenoxy, 3,4-dimethylbenzylloxy, 3,5-
20
dimethylbenzylloxy, 4-ethoxyphenoxy, 4-ethylbenzylloxy, 3-
ethylphenoxy, 4-ethylaminophenoxy, 3-ethyl-5-
methylphenoxy, 4-fluorobenzylloxy, 2-fluoro-3-
trifluoromethylbenzylloxy, 3-fluoro-5-
trifluoromethylbenzylloxy, 4-fluoro-2-
25
trifluoromethylbenzylloxy, 4-fluoro-3-
trifluoromethylbenzylloxy, 2-fluorophenoxy, 4-
fluorophenoxy, 2-fluoro-3-trifluoromethylphenoxy, 2-
fluorobenzylloxy, 4-fluorophenylamino, 2-fluoro-4-
trifluoromethylphenoxy, 4-isopropylbenzylloxy, 3-
30
isopropylphenoxy, 4-isopropylphenoxy, 4-isopropyl-3-
methylphenoxy, 4-isopropylbenzylloxy, 3-isopropylphenoxy,
4-isopropylphenoxy, 4-isopropyl-3-methylphenoxy,
phenylamino, 1-phenylethoxy, 2-phenylethoxy, 2-
phenylethyl, 2-phenylethylamino, phenylsulfonyl, 3-
35
trifluoromethoxybenzylloxy, 4-trifluoromethoxybenzylloxy,
3-trifluoromethoxyphenoxy, 4-trifluoromethoxyphenoxy, 3-

trifluoromethylbenzyloxy, 4-trifluoromethylbenzyloxy,
 2,4-bis-trifluoromethylbenzyloxy, 3-
 trifluoromethylbenzyl, 3,5-bis-trifluoromethylbenzyloxy,
 4-trifluoromethylphenoxy, 3-trifluoromethylphenoxy, 3-
 5 trifluoromethylthiobenzyloxy, 4-
 trifluoromethylthiobenzyloxy, 2,3,4-trifluorophenoxy,
 2,3,5-trifluorophenoxy, 3-pentafluoroethylphenoxy, 3-
 (1,1,2,2-tetrafluoroethoxy)phenoxy, and 3-
 trifluoromethylthiophenoxy;

10 Y^0 is selected from the group consisting of:

1- Q^b -4- Q^s -2- R^{16} -3- R^{17} -5- R^{18} -6- R^{19} benzene, 2- Q^b -5- Q^s -6- R^{17} -
 4- R^{18} -3- R^{19} pyridine, 3- Q^b -6- Q^s -2- R^{16} -5- R^{18} -4- R^{19} pyridine, 2- Q^b -
 5- Q^s -3- R^{16} -6- R^{18} pyrazine, 3- Q^b -6- Q^s -2- R^{18} -5- R^{18} -4-
 R^{19} pyridazine, 2- Q^b -5- Q^s -4- R^{17} -6- R^{18} pyrimidine, 5- Q^b -2- Q^s -4-
 15 R^{16} -6- R^{19} pyrimidine, 3- Q^b -5- Q^s -4- R^{16} -2- R^{19} thiophene, 2- Q^b -5-
 Q^s -3- R^{16} -4- R^{17} thiophene, 3- Q^b -5- Q^s -4- R^{16} -2- R^{19} furan, 2- Q^b -5- Q^s -
 3- R^{16} -4- R^{17} furan, 3- Q^b -5- Q^s -4- R^{16} -2- R^{19} pyrrole, 2- Q^b -5- Q^s -3-
 20 R^{16} -4- R^{17} pyrrole, 4- Q^b -2- Q^s -5- R^{19} imidazole, 2- Q^b -4- Q^s -5-
 R^{17} imidazole, 3- Q^b -5- Q^s -4- R^{16} isoxazole, 5- Q^b -3- Q^s -4-
 R^{16} isoxazole, 2- Q^b -5- Q^s -4- R^{16} pyrazole, 4- Q^b -2- Q^s -5-
 R^{19} thiazole, and 2- Q^b -5- Q^s -4- R^{17} thiazole;

25 R^{17} and R^{18} are independently selected from the group
 consisting of hydrido, methyl, ethyl, isopropyl, propyl,
 carboxy, amidino, guanidino, methoxy, ethoxy, isopropoxy,
 propoxy, hydroxy, amino, aminomethyl, 1-aminoethyl, 2-
 aminoethyl, N-methylamino, dimethylamino, N-ethylamino,
 methylthio, ethylthio, isopropylthio,
 trifluoromethylthio, methylsulfinyl, ethylsulfinyl,
 methylsulfonyl, ethylsulfonyl, trifluoromethyl,
 30 pentafluoroethyl, 2,2,2-trifluoroethyl, 2,2,3,3,3-
 pentafluoropropyl, trifluoromethoxy, 1,1,2,2-
 tetrafluoroethoxy, fluoro, chloro, bromo, hydroxymethyl,
 1-hydroxyethyl, 2-hydroxyethyl, and cyano;

35 R^{16} or R^{19} are selected from the group consisting of:

(i) hydrido, methyl, ethyl, isopropyl, propyl,
 carboxy, amidino, guanidino, methoxy, ethoxy, isopropoxy,

propoxy, hydroxy, amino, aminomethyl, 1-aminoethyl, 2-aminoethyl, N-methylamino, dimethylamino, N-ethylamino, methylthio, ethylthio, isopropylthio, trifluoromethylthio, methylsulfinyl, ethylsulfinyl, methylsulfonyl, ethylsulfonyl, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, 2,2,3,3,3-pentafluoropropyl, trifluoromethoxy, 1,1,2,2-tetrafluoroethoxy, fluoro, chloro, bromo, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, and cyano; and

10 (ii) $NR^{20}R^{21}$, $C(NR^{25})NR^{23}R^{24}$, and $N(R^{26})C(NR^{25})N(R^{23})(R^{24})$, with the proviso that R^{16} , R^{19} , and Q^b are not simultaneously hydrido;

15 Q^b is selected from the group consisting of $NR^{20}R^{21}$, hydrido, $C(NR^{25})NR^{23}R^{24}$, and $N(R^{26})C(NR^{25})N(R^{23})(R^{24})$, with the proviso that no more than one of R^{20} and R^{21} is hydroxy at the same time and with the further proviso that no more than one of R^{23} and R^{24} is hydroxy at the same time;

20 R^{20} , R^{21} , R^{23} , R^{24} , R^{25} , and R^{26} are independently selected from the group consisting of hydrido, methyl, ethyl, propyl, butyl, isopropyl, and hydroxy;

Q^s is selected from the group consisting of a bond, CH_2 , and CH_2CH_2 .

84. The compound of claim 83 or a pharmaceutically acceptable salt thereof, wherein;

25 M is $N\rightarrow O$;

B is selected from the group consisting of hydrido, ethyl, 2-propenyl,

30 2-propynyl, propyl, isopropyl, butyl, 2-butyl, (R)-2-butyl, (S)-2-butyl, tert-butyl, isobutyl, 1-pentyl, 3-pentyl, 2-methylbutyl, 2,2,2-trifluoroethyl, 6-amidocarbonylhexyl, 4-methyl-2-pentyl, 3-hydroxypropyl, 1-methoxy-2-propyl, 2-methoxyethyl, 2-methyl-2-butyl, 3-methyl-2-butyl, 2-dimethylaminopropyl, 2-cyanoethyl, 6-hydroxyhexyl, 2-hydroxyethyl, 2-amidinoethyl, 2-guanidinoethyl, 3-guanidinopropyl, 4-guanidinobutyl, 3-

hydroxypropyl, 4-hydroxybutyl, 6-cyanohexyl, 2-dimethylaminoethyl, 3-methylbutyl, 2-methylbutyl, (S)-2-methylbutyl, 3-aminopropyl, 2-hexyl, and 4-aminobutyl;

A is selected from the group consisting of a bond,
5 CH₂, NHC(O), CH₂CH₂, CH₂CH₂CH₂, and CH₃CHCH₂;

Ja is N or C-X⁰;

Jb is N or C-R¹;

R¹ and X⁰ are independently selected from the group consisting of hydrido, hydroxy, amino, amidino,
10 hydroxyamino, aminomethyl, methylamino, cyano, methyl, trifluoromethyl, methoxy, hydroxymethyl, methoxyamino, methylthio, trifluoromethoxy, fluoro, and chloro;

R² is Z⁰-Q;

Z⁰ is selected from the group consisting of a bond,
15 CH₂, O, S, NH, N(CH₃), OCH₂, and SCH₂;

Q is selected from the group consisting of 3-amidocarbonyl-5-aminophenyl, 3-amino-5-(N-benzylamidocarbonyl)phenyl, 3-amino-5-benzylphenyl, 3-amino-5-(2-phenylethyl)phenyl, 3-amino-5-benzylaminophenyl, 3-amino-5-(2-phenylethylamino)phenyl, 3-amino-5-benzyloxyphenyl, 3-amino-5-(2-phenylethoxy)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(3-fluorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-methyl-1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-benzylamidosulfonyl)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, 3-amino-5-(N-ethylamidocarbonyl)phenyl, 3-amino-5-(N-isopropylamidocarbonyl)phenyl, 3-amino-5-(N-propylamidocarbonyl)phenyl, 3-amino-5-(N-isobutylamidocarbonyl)phenyl, 3-amino-5-(N-(2-butyl)amidocarbonyl)phenyl, 3-amino-5-(N-cyclobutylamidocarbonyl)phenyl, 3-amino-5-(N-cyclopentylamidocarbonyl)phenyl, 3-amino-5-(N-

cyclohexylamidocarbonyl)phenyl, 5-amino-2-fluorophenyl,
 3-amino-5-hydroxymethylphenyl, 5-amino-3-methoxycarbonylphenyl, 3-amidinophenyl, 3-amino-2-methylphenyl, 5-amino-2-methylthiophenyl, 3-aminophenyl, 3-amino-5-(4-trifluoromethylbenzylamino)phenyl, 3-amino-5-(4-trifluoromethylbenzyloxy)phenyl, 3-carboxyphenyl, 3-carboxy-5-hydroxyphenyl, 3-amino-5-carboxyphenyl, 3-chlorophenyl, 2-chlorophenyl, 3-cyanophenyl, 3,5-diaminophenyl, 3-dimethylaminophenyl, 2-fluorophenyl, 3-fluorophenyl, 2-hydroxyphenyl, 3-hydroxyphenyl, 3-methanesulfonylaminophenyl, 2-methoxyphenyl, 3-methoxyphenyl, 3-methoxyaminophenyl, 3-methoxycarbonylphenyl, 2-methylaminophenyl, 3-methylaminophenyl, 2-methylphenyl, 3-methylphenyl, 4-methylphenyl, phenyl, 3-trifluoroacetamidophenyl, 3-trifluoromethylphenyl, 2-trifluoromethylphenyl, 5-amino-2-thienyl, 5-amino-3-thienyl, 3-bromo-2-thienyl, 3-pyridyl, 4-pyridyl, 2-thienyl, and 3-thienyl;

Y^0 is selected from the group consisting of:

20 $1-Q^b-4-Q^s-2-R^{16}-3-R^{17}-5-R^{18}-6-R^{19}$ benzene, $2-Q^b-5-Q^s-6-R^{17}-4-R^{18}-3-R^{19}$ pyridine, $3-Q^b-6-Q^s-2-R^{16}-5-R^{18}-4-R^{19}$ pyridine, $3-Q^b-5-Q^s-4-R^{16}-2-R^{19}$ thiophene, and $2-Q^b-5-Q^s-3-R^{16}-4-R^{17}$ thiophene;

R^{16} and R^{19} are selected from the group consisting of:

25 (i) hydrido, amidino, amino, aminomethyl, methoxy, methylamino, hydroxy, hydroxymethyl, fluoro, chloro, and cyano; and

(ii) $C(NR^{25})NR^{23}R^{24}$ with the proviso that R^{16} , R^{19} , and Q^b are not simultaneously hydrido and not more than one of R^{16} may $(C(NR^{25})NR^{23}R^{24})$ at the same time;

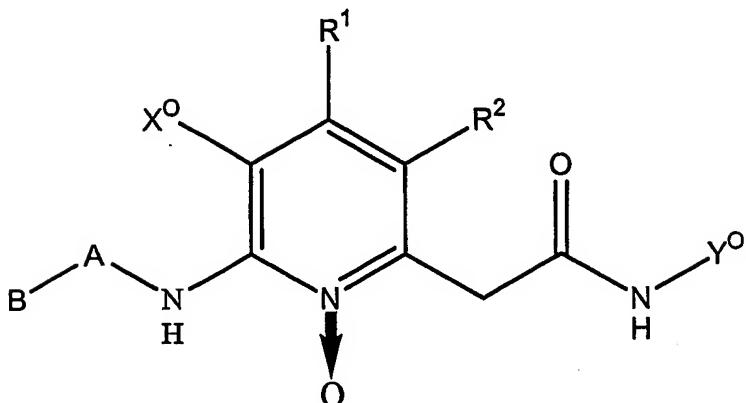
30 R^{17} and R^{18} are independently selected from the group consisting of hydrido, fluoro, chloro, hydroxy, hydroxymethyl, amino, carboxy, and cyano;

Q^b is $C(NR^{25})NR^{23}R^{24}$ or hydrido;

R^{23} , R^{24} , and R^{25} are independently hydrido or methyl;

35 Q^s is CH_2 .

85. The compound of claim 82 having the structure:



or a pharmaceutically acceptable salt thereof, wherein;

B is selected from the group consisting of hydrido, C2-C8 alkyl, C3-C8 alkenyl, C3-C8 alkynyl, and C2-C8 haloalkyl, wherein each member of group B is optionally substituted at any carbon up to and including 6 atoms from the point of attachment of B to A with one or more of the group consisting of R³², R³³, R³⁴, R³⁵, and R³⁶;

R³², R³³, R³⁴, R³⁵, and R³⁶ are independently selected from the group consisting of hydrido, acetamido, haloacetamido, amidino, guanidino, alkoxy, hydroxy, amino, alkoxyamino, alkylamino, alkylthio, amidosulfonyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, carboalkoxy, carboxy, carboxamido, cyano, and Q^b;

A is a bond or $(CH(R^{15}))_{pa}-(W^7)_{rr}$ wherein rr is 0 or 1, pa is an integer selected from 0 through 3, and W⁷ is N(R⁷);

R⁷ is hydrido or alkyl;

R¹⁵ is selected from the group consisting of hydrido, halo, alkyl, and haloalkyl;

R¹ and X^o are independently selected from the group consisting of hydrido, hydroxy, hydroxyamino, amidino, amino, cyano, hydroxyalkyl, alkoxy, alkyl, alkylamino, aminoalkyl, alkylthio, alkoxyamino, haloalkyl, haloalkoxy, and halo;

R² is Z⁰-Q;

Z^0 is a bond;

Q is phenyl or a heteroaryl of 5 or 6 ring members, wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to Z^0 is optionally substituted by R^9 , the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R^{13} , a carbon adjacent to R^9 and two atoms from the carbon at the point of attachment is optionally substituted by R^{10} , a carbon adjacent to R^{13} and two atoms from the carbon at the point of attachment is optionally substituted by R^{12} , and any carbon adjacent to both R^{10} and R^{12} is optionally substituted by R^{11} ;

R^9 , R^{11} , and R^{13} are independently selected from the group consisting of hydrido, hydroxy, amino, amidino, guanidino, alkylamino, alkylthio, alkoxy, alkylsulfinyl, alkylsulfonyl, amidosulfonyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, carboxy, carboxamido, and cyano;

R^{10} and R^{12} are independently selected from the group consisting of hydrido, acetamido, haloacetamido, amidino, guanidino, alkyl, alkoxy, alkoxyamino, hydroxy, amino, alkylamino, alkylsulfonamido, amidosulfonyl, hydroxyalkyl, aminoalkyl, halo, haloalkyl, carboalkoxy, carboxy, carboxamido, carboxyalkyl, and cyano;

Y^0 is phenyl or a heteroaryl of 5 or 6 ring members, wherein one carbon of said phenyl or said heteroaryl is substituted by Q^a , a carbon two or three atoms from the point of attachment of Q^a to said phenyl or said heteroaryl is substituted by Q^b , a carbon adjacent to the point of attachment of Q^a is optionally substituted by R^{17} , another carbon adjacent to the point of attachment of Q^a is optionally substituted by R^{18} , a carbon adjacent to Q^b is optionally substituted by R^{16} , and another carbon adjacent to Q^b is optionally substituted by R^{19} ;

R^{17} and R^{18} are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy,

haloalkylthio, alkoxy, hydroxy, amino, alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano;

5 R¹⁶ and R¹⁹ are selected from the group consisting of:

(i) hydrido, amidino, guanidino, carboxy, haloalkylthio, alkoxy, hydroxy, amino, alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano; and

10 (ii) NR²⁰R²¹, N(R²⁶)C(NR²⁵)N(R²³)(R²⁴), and C(NR²⁵)NR²³R²⁴, with the proviso that R¹⁶, R¹⁹, and Q^b are not simultaneously hydrido;

15 Q^b is selected from the group consisting of NR²⁰R²¹, hydrido, N(R²⁶)C(NR²⁵)N(R²³)(R²⁴), and C(NR²⁵)NR²³R²⁴;

R²⁰, R²¹, R²³, R²⁴, R²⁵, and R²⁶ are independently hydrido or alkyl;

Q^s is CH₂.

20 86. The compound of claim 85 or a pharmaceutically acceptable salt thereof, wherein;

B is selected from the group consisting of hydrido, ethyl, 2-propenyl, 2-propynyl, propyl, isopropyl, butyl, 2-butenyl, 2-butynyl, sec-butyl, tert-butyl, isobutyl, 2-methylpropenyl, 1-pentyl, 2-pentenyl, 3-pentenyl, 2-pentynyl, 3-pentynyl, 2-pentyl, 3-pentyl, 2-methylbutyl, 2-methyl-2-butenyl, 3-methylbutyl, 3-methyl-2-butenyl, 1-hexyl, 2-hexenyl, 3-hexenyl, 4-hexenyl, 2-hexynyl, 3-hexynyl, 4-hexynyl, 2-hexyl, 1-methyl-2-pentenyl, 1-methyl-3-pentenyl, 1-methyl-2-pentynyl, 1-methyl-3-pentynyl, 3-hexyl, 1-ethyl-2-butenyl, 1-heptyl, 2-heptenyl, 3-heptenyl, 4-heptenyl, 5-heptenyl, 2-heptynyl, 3-heptynyl, 4-heptynyl, 5-heptynyl, 2-heptyl, 1-methyl-2-hexenyl, 1-methyl-3-hexenyl, 1-methyl-4-hexenyl, 1-methyl-2-hexynyl, 1-methyl-3-hexynyl, 1-methyl-4-hexynyl, 3-heptyl, 1-ethyl-2-pentenyl, 1-ethyl-3-pentenyl, 1-

ethyl-2-pentynyl, 1-ethyl-3-pentynyl, 2,2,2-trifluoroethyl, 2,2-difluoropropyl, 4-trifluoromethyl-5,5,5-trifluoropentyl, 4-trifluoromethylpentyl, 5,5,6,6,6-pentafluorohexyl, and 3,3,3-trifluoropropyl, wherein each member of group B is optionally substituted at any carbon up to and including 5 atoms from the point of attachment of B to A with one or more of the group consisting of R³², R³³, R³⁴, R³⁵, and R³⁶;

R³², R³³, R³⁴, R³⁵, and R³⁶ are independently selected from the group consisting of hydrido, amidino, guanidino, methyl, ethyl, methoxy, ethoxy, hydroxy, amino, N-methylamino, dimethylamino, methoxyamino, methylthio, ethylthio, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, fluoro, chloro, bromo, amidosulfonyl, N-methylamidosulfonyl, hydroxymethyl, amidocarbonyl, carboxy, cyano, and Q^b;

A is selected from the group consisting of:

- (i) a bond, NH, N(CH₃), CH₂, CH₃CH, and CH₂CH₂; and
- (ii) CH₂N(CH₃), CH₂N(CH₂CH₃), CH₂CH₂N(CH₃), and

CH₂CH₂N(CH₂CH₃) with the proviso that B is hydrido;

X° is selected from the group consisting of hydrido, hydroxy, amino, amidino, aminomethyl, cyano, methyl, trifluoromethyl, hydroxymethyl, chloro, and fluoro;

R¹ is selected from the group consisting of hydrido, hydroxy, hydroxymethyl, amino, aminomethyl, methylamino, cyano, methyl, trifluoromethyl, methoxy, methylthio, trifluoromethoxy, fluoro, and chloro;

R² is selected from the group consisting of phenyl, 2-thienyl, 2-furyl, 2-pyrrolyl, 2-imidazolyl, 2-thiazolyl, 3-isoxazolyl, 2-pyridyl, and 3-pyridyl, wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to the pyridine ring is optionally substituted by R⁹, the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R¹³, a carbon adjacent to R⁹ and two atoms from the carbon at the point of attachment

is optionally substituted by R¹⁰, a carbon adjacent to R¹³ and two atoms from the carbon at the point of attachment is optionally substituted by R¹², and any carbon adjacent to both R¹⁰ and R¹² is optionally substituted by R¹¹;

5 R⁹, R¹¹, and R¹³ are independently selected from the group consisting of hydrido, methyl, ethyl, methoxy, ethoxy, hydroxy, amino, N-methylamino, N,N-dimethylamino, methylthio, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, fluoro, chloro, bromo, amidosulfonyl, N-methylamidosulfonyl, N,N-dimethylamidosulfonyl, hydroxymethyl, 1-hydroxyethyl, amidocarbonyl, N-methylamidocarbonyl, carboxy, and cyano;

10 R¹⁰ and R¹² are independently selected from the group consisting of hydrido, amidino, amidocarbonyl, N-methylamidocarbonyl, N-benzylamidocarbonyl, N-(2-chlorobenzyl)amidocarbonyl, N-(3-fluorobenzyl)amidocarbonyl, N-(2-trifluoromethylbenzyl)amidocarbonyl, N-(1-phenylethyl)amidocarbonyl, N-(1-methyl-1-phenylethyl)amidocarbonyl, N-benzylamidosulfonyl, N-(2-chlorobenzyl)amidosulfonyl, N-ethylamidocarbonyl, N-isopropylamidocarbonyl, N-propylamidocarbonyl, N-isobutylamidocarbonyl, N-(2-butyl)amidocarbonyl, N-cyclobutylamidocarbonyl, N-cyclopentylamidocarbonyl, N-cyclohexylamidocarbonyl, guanidino, methyl, ethyl, methoxy, ethoxy, hydroxy, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, carboxy, carboxymethyl, amino, acetamido, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, trifluoroacetamido, aminomethyl, N-methylamino, dimethylamino, methoxyamino, amidosulfonyl, N-methylamidosulfonyl, N,N-dimethylamidosulfonyl, methanesulfonamido, methoxycarbonyl, fluoro, chloro, bromo, and cyano;

15 Y⁰ is selected from the group consisting of:

20 1-Q^b-4-Q^s-2-R¹⁶-3-R¹⁷-5-R¹⁸-6-R¹⁹benzene, 2-Q^b-5-Q^s-6-R¹⁷-4-R¹⁸-3-R¹⁹pyridine, 2-Q^b-5-Q^s-3-R¹⁶-4-R¹⁷thiophene, 3-Q^b-6-

Q^s -2-R¹⁶-5-R¹⁸-4-R¹⁹pyridine, 3-Q^b-5-Q^s-4-R¹⁶-2-R¹⁹thiophene, 3-Q^b-5-Q^s-4-R¹⁶-2-R¹⁹furan, 2-Q^b-5-Q^s-3-R¹⁶-4-R¹⁷furan, 3-Q^b-5-Q^s-4-R¹⁶-2-R¹⁹pyrrole, 2-Q^b-5-Q^s-3-R¹⁶-4-R¹⁷pyrrole, 4-Q^b-2-Q^s-5-R¹⁹thiazole, and 2-Q^b-5-Q^s-4-R¹⁷thiazole;

5 R¹⁶, R¹⁷, R¹⁸, and R¹⁹ are independently selected from the group consisting of hydrido, methyl, ethyl, amidino, guanidino, methoxy, hydroxy, amino, aminomethyl, 1-aminoethyl, 2-aminoethyl, N-methylamino, dimethylamino, methylthio, ethylthio, trifluoromethylthio,

10 methylsulfinyl, methylsulfonyl, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, trifluoromethoxy, fluoro, chloro, hydroxymethyl, carboxy, and cyano;

Q^b is selected from the group consisting of NR²⁰R²¹, C(NR²⁵)NR²³R²⁴, and N(R²⁶)C(NR²⁵)N(R²³)(R²⁴);

15 R²⁰, R²¹, R²³, R²⁴, R²⁵, and R²⁶ are independently selected from the group consisting of hydrido, methyl, and ethyl;

Q^s is CH₂.

20 87. The compound of claim 86 or a pharmaceutically acceptable salt thereof, wherein;

B is selected from the group consisting of hydrido, ethyl, 2-propenyl, 2-propynyl, propyl, isopropyl, butyl, 2-butyl, (R)-2-butyl, (S)-2-butyl, tert-butyl, isobutyl, 1-pentyl, 3-pentyl, 2-methylbutyl, 2,2,2-trifluoroethyl, 25 6-amidocarbonylhexyl, 4-methyl-2-pentyl, 3-hydroxypropyl, 1-methoxy-2-propyl, 2-methoxyethyl, 2-methyl-2-butyl, 3-methyl-2-butyl, 2-dimethylaminopropyl, 2-cyanoethyl, 6-hydroxyhexyl, 2-hydroxyethyl, 2-amidinoethyl, 2-guanidinoethyl, 3-guanidinopropyl, 4-guanidinobutyl, 3-hydroxypropyl, 4-hydroxybutyl, 6-cyanohexyl, 2-dimethylaminoethyl, 3-methylbutyl, 2-methylbutyl, (S)-2-methylbutyl, 3-aminopropyl, 2-hexyl, and 4-aminobutyl;

30 A is selected from the group consisting of a bond, CH₂, CH₃CH, and CH₂CH₂;

35 X° is selected from the group consisting of hydrido,

hydroxy, amino, amidino, aminomethyl, cyano, methyl, trifluoromethyl, hydroxymethyl, and fluoro;

R¹ is selected from the group consisting of hydrido, hydroxy, hydroxymethyl, amino, aminomethyl, cyano, 5 methyl, trifluoromethyl, and fluoro;

R² is selected from the group consisting of 3-amidocarbonyl-5-aminophenyl, 3-amidocarbonyl-5-aminophenyl, 3-amino-5-(N-benzylamidocarbonyl)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(3-fluorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-methyl-1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-benzylamidosulfonyl)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, 3-amino-5-(N-ethylamidocarbonyl)phenyl, 3-amino-5-(N-isopropylamidocarbonyl)phenyl, 3-amino-5-(N-propylamidocarbonyl)phenyl, 3-amino-5-(N-isobutylamidocarbonyl)phenyl, 3-amino-5-(N-(2-butyl)amidocarbonyl)phenyl, 3-amino-5-(N-cyclobutylamidocarbonyl)phenyl, 3-amino-5-(N-cyclopentylamidocarbonyl)phenyl, 3-amino-5-(N-cyclohexylamidocarbonyl)phenyl, 5-amino-2-fluorophenyl, 3-amino-5-hydroxymethylphenyl, 5-amino-3-methoxycarbonylphenyl, 3-amidinophenyl, 3-amino-2-methylphenyl, 5-amino-2-methylthiophenyl, 3-aminophenyl, 3-carboxyphenyl, 3-carboxy-5-aminophenyl, 3-carboxy-5-hydroxyphenyl, 3-carboxymethyl-5-aminophenyl, 3-carboxymethyl-5-hydroxyphenyl, 3-carboxymethylphenyl, 3-chlorophenyl, 2-chlorophenyl, 3-cyanophenyl, 3,5-diaminophenyl, 3-dimethylaminophenyl, 2-fluorophenyl, 3-fluorophenyl, 2,5-difluorophenyl, 2-hydroxyphenyl, 3-hydroxyphenyl, 3-methanesulfonylaminophenyl, 2-methoxyphenyl, 3-methoxyphenyl, 3-methoxyaminophenyl, 3-methoxycarbonylphenyl, 2-methylaminophenyl, 3-methylaminophenyl, 2-methylphenyl, 3-methylphenyl, 4-

methylphenyl, phenyl, 3-trifluoroacetamidophenyl, 3-trifluoromethylphenyl, 2-trifluoromethylphenyl, 5-amino-2-thienyl, 5-amino-3-thienyl, 3-bromo-2-thienyl, 3-pyridyl, 4-pyridyl, 2-thienyl, and 3-thienyl;

5 Y^0 is selected from the group consisting of:

1-Q^b-4-Q^s-2-R¹⁶-3-R¹⁷-5-R¹⁸-6-R¹⁹benzene, 2-Q^b-5-Q^s-6-R¹⁷-4-R¹⁸-3-R¹⁹pyridine, 3-Q^b-6-Q^s-2-R¹⁶-5-R¹⁸-4-R¹⁹pyridine, 3-Q^b-5-Q^s-4-R¹⁶-2-R¹⁹thiophene, and 2-Q^b-5-Q^s-3-R¹⁶-4-R¹⁷thiophene;

10 R¹⁶ and R¹⁹ are independently selected from the group consisting of hydrido, amidino, amino, aminomethyl, methoxy, methylamino, hydroxy, hydroxymethyl, fluoro, chloro, and cyano;

15 R¹⁷ and R¹⁸ are independently selected from the group consisting of hydrido, fluoro, chloro, hydroxy, hydroxymethyl, amino, carboxy, and cyano;

Q^b is C(NR²⁵)NR²³R²⁴;

R²³, R²⁴, and R²⁵ are independently hydrido or methyl;
Q^s is CH₂.

20 88. The compound of claim 87 or a pharmaceutically acceptable salt thereof, wherein;

B is selected from the group consisting of hydrido, ethyl, 2-propenyl, 2-propynyl, propyl, isopropyl, butyl, 2-butyl, (R)-2-butyl, (S)-2-butyl, tert-butyl, isobutyl, 1-pentyl, 3-pentyl, 2-methylbutyl, 2,2,2-trifluoroethyl, 6-amidocarbonylhexyl, 4-methyl-2-pentyl, 3-hydroxypropyl, 1-methoxy-2-propyl, 2-methoxyethyl, 2-methyl-2-butyl, 3-methyl-2-butyl, 2-dimethylaminopropyl, 2-cyanoethyl, 6-hydroxyhexyl, 2-hydroxyethyl, 2-amidinoethyl, 2-guanidinoethyl, 3-guanidinopropyl, 4-guanidinobutyl, 3-hydroxypropyl, 4-hydroxybutyl, 6-cyanoethyl, 2-dimethylaminoethyl, 3-methylbutyl, 2-methylbutyl, (S)-2-methylbutyl, 3-aminopropyl, 2-hexyl, and 4-aminobutyl;

A is selected from the group consisting of a bond, CH₂, CH₃CH, and CH₂CH₂;

35 X° is selected from the group consisting of hydrido,

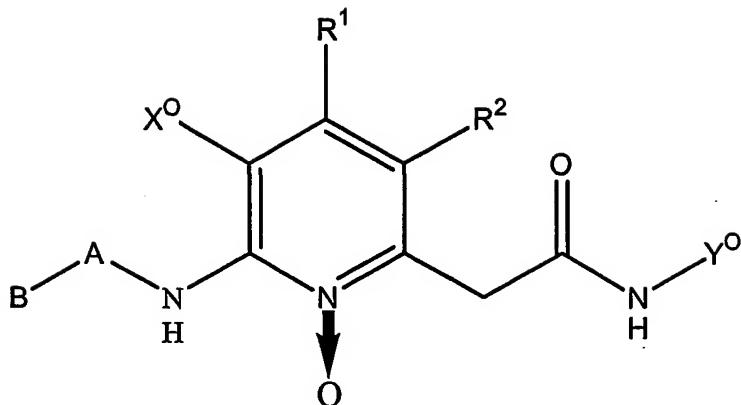
hydroxy, amino, amidino, aminomethyl, cyano, methyl, trifluoromethyl, hydroxymethyl, and fluoro;

R¹ is selected from the group consisting of hydrido, hydroxy, hydroxymethyl, amino, aminomethyl, cyano, 5 methyl, trifluoromethyl, and fluoro;

R² is selected from the group consisting of 3-amidocarbonyl-5-aminophenyl, 3-amino-5-(N-benzylamidocarbonyl)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(3-fluorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-methyl-1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-benzylamidosulfonyl)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, 3-amino-5-(N-ethylamidocarbonyl)phenyl, 3-amino-5-(N-isopropylamidocarbonyl)phenyl, 3-amino-5-(N-propylamidocarbonyl)phenyl, 3-amino-5-(N-isobutylamidocarbonyl)phenyl, 3-amino-5-(N-(2-butyl)amidocarbonyl)phenyl, 3-amino-5-(N-cyclobutylamidocarbonyl)phenyl, 3-amino-5-(N-cyclopentylamidocarbonyl)phenyl, 3-amino-5-(N-cyclohexylamidocarbonyl)phenyl, 3-aminophenyl, 3-carboxy-5-aminophenyl, 3-chlorophenyl, 3,5-diaminophenyl, 3-dimethylaminophenyl, 3-hydroxyphenyl, 3-methanesulfonylaminophenyl, 3-methylaminophenyl, 2-methylphenyl, 3-methylphenyl, phenyl, 3-trifluoroacetamidophenyl, 3-bromo-2-thienyl, 2-thienyl, and 3-thienyl;

Y⁰ is selected from the group consisting of 5-amidino-2-thienylmethyl, 4-amidinobenzyl, 2-fluoro-4-amidinobenzyl, and 3-fluoro-4-amidinobenzyl.

89. The compound of Claim 82 wherein the compound is selected from the group consisting of:



or a pharmaceutically acceptable salt thereof, wherein;

R^2 is 3-aminophenyl, B is 2,2,2-trifluoroethyl, A is a bond, Y^{O} is 4-amidinobenzyl, and R^1 is chloro;

5 R^2 is 3-aminophenyl, B is (S)-2-butyl, A is a bond, Y^{O} is 4-amidinobenzyl, and R^1 is chloro;

10 R^2 is 5-amino-2-fluorophenyl, B is isopropyl, A is a bond, Y^{O} is 4-amidinobenzyl, and R^1 is chloro;

15 R^2 is 2-methyl-3-aminophenyl, B is isopropyl, A is a bond, Y^{O} is 4-amidinobenzyl, and R^1 is chloro;

20 R^2 is 3-aminophenyl, B is ethyl, A is a bond, Y^{O} is 4-amidinobenzyl, and R^1 is chloro;

25 R^2 is 3-aminophenyl, B is ethyl, A is a bond, Y^{O} is 4-amidino-2-fluorobenzyl, and R^1 is chloro;

30 R^2 is 3-aminophenyl, B is 2-propenyl, A is a bond, Y^{O} is 4-amidinobenzyl, and R^1 is chloro;

35 R^2 is 3-aminophenyl, B is isopropyl, A is a bond, Y^{O} is 4-amidino-2-fluorobenzyl, and R^1 is chloro;

40 R^2 is 3-aminophenyl, B is isopropyl, A is a bond, Y^{O} is 4-amidinobenzyl, and R^1 is chloro;

45 R^2 is 3-aminophenyl, B is 2-butyl, A is a bond, Y^{O} is 4-amidinobenzyl, and R^1 is chloro;

50 R^2 is 3-aminophenyl, B is (R)-2-butyl, A is a bond, Y^{O} is 4-amidinobenzyl, and R^1 is chloro;

55 R^2 is 3-aminophenyl, B is 2-propynyl, A is a bond, Y^{O} is 4-amidinobenzyl, and R^1 is chloro;

R² is 3-aminophenyl, B is 3-pentyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is hydrido;

R² is 3-aminophenyl, B is hydrido, A is CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

5 R² is 3-aminophenyl, B is ethyl, A is CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-aminophenyl, B is 2-methypropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

10 R² is 3-aminophenyl, B is 2-propyl, A is CH₃CH, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-aminophenyl, B is propyl, A is a bond, Y⁰ is 4-amidino-2-fluorobenzyl, and R¹ is chloro;

R² is 3-aminophenyl, B is 6-amidocarbonylhexyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

15 R² is 3-aminophenyl, B is tert-butyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is hydrido;

R² is 3-aminophenyl, B is tert-butyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

20 R² is 3-aminophenyl, B is 3-hydroxypropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-aminophenyl, B is 2-methylpropyl, A is a bond, Y⁰ is 4-amidino-2-fluorobenzyl, and R¹ is chloro;

R² is 3-aminophenyl, B is butyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

25 R² is 3-aminophenyl, B is 1-methoxy-2-propyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-aminophenyl, B is 2-methoxyethyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

30 R² is 3-aminophenyl, B is 2-propyl, A is a bond, Y⁰ is 5-amidino-2-thienylmethyl, and R¹ is chloro;

R² is 5-amino-2-methylthiophenyl, B is 2-propyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-carboxyphenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

35 R² is 3-amino-5-carbomethoxyphenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-aminophenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is bromo;

R² is 3-amino-5-carboxamidophenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

5 R² is 3-amino-5-(N-benzyl-N-methylamidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-(1-phenylethyl)amidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

10 R² is 3-amino-5-(N-(2-phenyl-2-propyl)amidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-(2,4-dichlorobenzyl)amidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

15 R² is 3-amino-5-(N-(4-bromobenzyl)amidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

20 R² is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-(2-chlorobenzyl)amidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

25 R² is 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

30 R² is 3-amino-5-(N-(3-fluorobenzyl)amidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-(3-trifluoromethylbenzyl)amidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-isobutylamidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

5 R² is 3-amino-5-(N-cyclobutylamidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-cyclopentylamidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

10 R² is 3-amino-5-(N-cycloheptylamidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

15 R² is 3-amino-5-(N-(2-pyridylmethyl)amidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-(3-pyridylmethyl)amidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

20 R² is 3-amino-5-(N-(2-(4-methoxyphenyl)ethyl)amidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-(3-phenylpropyl)amidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

25 R² is 3-amino-5-(N-(2,2-diphenylethyl)amidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

30 R² is 3-amino-5-(N-(2-naphthylmethyl)amidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-(1,2,3,4-tetrahydronaphth-2-ylmethyl)amidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

35 R² is 3-aminophenyl, B is 2-propyl, A is a bond, Y⁰ is 4-amidino-3-fluorobenzyl, and R¹ is hydrido;

R² is 3-carboxyphenyl, B is 2-propyl, A is a bond, Y⁰

is 4-amidinobenzyl, and R¹ is hydrido;

R² is 3-aminophenyl, B is 2-propyl, A is a bond, Y⁰ is 4-amidino-3-fluorobenzyl, and R¹ is chloro;

5 R² is 3,5-diaminophenyl, B is 2,2,2-trifluoroethyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3,5-diaminophenyl, B is (S)-2-butyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3,5-diaminophenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

10 R² is 3,5-diaminophenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidino-2-fluorobenzylbenzyl, and R¹ is chloro;

R² is 3,5-diaminophenyl, B is ethyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

15 R² is 3,5-diaminophenyl, B is ethyl, A is a bond, Y⁰ is 4-amidino-2-fluorobenzyl, and R¹ is chloro;

R² is 3-amino-5-carboxyphenyl, B is 2,2,2-trifluoroethyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

20 R² is 3-amino-5-carboxyphenyl, B is (S)-2-butyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-carboxyphenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidino-2-fluorobenzylbenzyl, and R¹ is chloro;

25 R² is 3-amino-5-carboxyphenyl, B is ethyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-carboxyphenyl, B is ethyl, A is a bond, Y⁰ is 4-amidino-2-fluorobenzyl, and R¹ is chloro;

30 R² is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is 2,2,2-trifluoroethyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is (S)-2-butyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

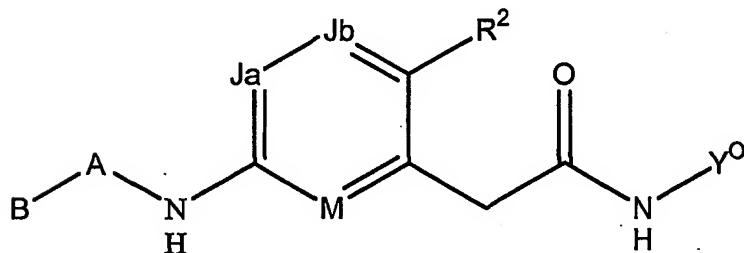
35 R² is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is isopropyl, A is a bond, Y⁰ is 4-amidino-2-fluorobenzylbenzyl, and R¹ is chloro;

R^2 is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is ethyl, A is a bond, Y^0 is 4-amidinobenzyl, and R^1 is chloro;

5 R^2 is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is ethyl, A is a bond, Y^0 is 4-amidino-2-fluorobenzyl, and R^1 is chloro;

R^2 is 3,5-diaminophenyl, B is isopropyl, A is a bond, Y^0 is 4-amidinobenzylbenzyl, and R^1 is hydrido.

90. The compound of claim 67 having the structure:



10 or a pharmaceutically acceptable salt thereof, wherein;

 M is N or $N\rightarrow O$;

 B is a C3-C7 cycloalkyl or a C4-C6 saturated heterocyclyl, wherein each ring carbon is optionally substituted with R^{33} , a ring carbon other than the ring carbon at the point of attachment of B to A is optionally substituted with oxo provided that no more than one ring carbon is substituted by oxo at the same time, ring carbons and a nitrogen adjacent to the carbon atom at the point of attachment are optionally substituted with R^9 or R^{13} , a ring carbon or nitrogen adjacent to the R^9 position and two atoms from the point of attachment is optionally substituted with R^{10} , a ring carbon or nitrogen adjacent to the R^{13} position and two atoms from the point of attachment is optionally substituted with R^{12} , a ring carbon or nitrogen three atoms from the point of attachment and adjacent to the R^{10} position is optionally substituted with R^{11} , a ring carbon or nitrogen three atoms from the point of attachment and adjacent to the R^{12}

position is optionally substituted with R³³, and a ring carbon or nitrogen four atoms from the point of attachment and adjacent to the R¹¹ and R³³ positions is optionally substituted with R³⁴;

5 R⁹, R¹¹, and R¹³ are independently selected from the group consisting of hydrido, hydroxy, amino, amidino, guanidino, alkylamino, alkylthio, alkylsulfonamido, alkylsulfinyl, alkylsulfonyl, amidosulfonyl, alkyl, alkoxy, halo, haloalkyl, haloalkoxy, hydroxyalkyl, hydroxyhaloalkyl, carboxy, carboxamido, and cyano;

10 R¹⁰ and R¹² are independently selected from the group consisting of hydrido, acetamido, haloacetamido, amidino, guanidino, alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heterocyclyl, alkoxy, cycloalkoxy, cycloalkylalkoxy, aralkoxy, aryloxy, heteroaryloxy, heteroaralkoxy, heterocyclxyoxy, heterocyclylalkoxy, hydroxy, amino, alkoxyamino, alkylamino, arylamino, aralkylamino, heteroarylalmino, heteroaralkylamino, heterocyclylamino, 20 heterocyclylalkylamino, alkylsulfonamido, amidosulfonyl, arylsulfinyl, aralkylsulfinyl, cycloalkylsulfinyl, heteroarylsulfinyl, arylsulfonyl, aralkylsulfonyl, cycloalkylsulfonyl, heteroarylsulfonyl, hydroxyalkyl, hydroxyhaloalkyl, aminoalkyl, carboalkoxy, carboxy, carboxyalkyl, carboxamido, halo, haloalkyl, and cyano;

25 R³⁴ is selected from the group consisting of hydrido, acetamido, haloacetamido, amidino, guanidino, alkoxy, hydroxy, amino, alkoxyamino, alkylamino, alkylthio, amidosulfonyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, hydroxyhaloalkyl, carboalkoxy, carboxy, carboxamido, and cyano;

30 R³³ is selected from the group consisting of hydrido, acetamido, haloacetamido, amidino, guanidino, alkoxy, hydroxy, amino, alkoxyamino, alkylamino, alkylthio, amidosulfonyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, hydroxyhaloalkyl, carboalkoxy, carboxy,

carboxamido, cyano, and Q^b;

A is a bond or (CH(R¹⁵))_{pa}-(W⁷)_{rr} wherein rr is 0 or 1, pa is an integer selected from 0 through 3, and W⁷ is (R⁷)NC(O) or N(R⁷);

5 R⁷ is selected from the group consisting of hydrido, hydroxy and alkyl;

R¹⁵ is selected from the group consisting of hydrido, halo, alkyl, and haloalkyl;

Ja is N or C-X⁰;

10 Jb is N or C-R¹;

R¹ and X⁰ are independently selected from the group consisting of hydrido, hydroxy, hydroxyamino, amidino, amino, cyano, hydroxyalkyl, alkoxy, alkyl, alkylamino, aminoalkyl, alkylthio, alkoxyamino, haloalkyl,

15 haloalkoxy, and halo;

R² is Z⁰-Q;

Z⁰ is selected from the group consisting of a bond, CH₂, CH₂CH₂, W⁰-(CH(R⁴²))_p, wherein p is 0 or 1 and W⁰ is selected from the group consisting of O, S, and N(R⁴¹);

20 R⁴¹ and R⁴² are independently hydrido or alkyl;

Q is phenyl or a heteroaryl of 5 or 6 ring members, wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to Z⁰ is optionally substituted by R⁹, the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R¹³, a carbon adjacent to R⁹ and two atoms from the carbon at the point of attachment is optionally substituted by R¹⁰, a carbon adjacent to R¹³ and two atoms from the carbon at the point of attachment is optionally substituted by R¹², and any carbon adjacent to both R¹⁰ and R¹² is optionally substituted by R¹¹;

30 Y⁰ is phenyl or a heteroaryl of 5 or 6 ring members, wherein one carbon of said phenyl or said heteroaryl is substituted by Q^s, a carbon two or three atoms from the point of attachment of Q^s to said phenyl or said heteroaryl is substituted by Q^b, a carbon adjacent to the

point of attachment of Q^a is optionally substituted by R¹⁷, another carbon adjacent to the point of attachment of Q^a is optionally substituted by R¹⁸, a carbon adjacent to Q^b is optionally substituted by R¹⁶, and another carbon adjacent to Q^b is optionally substituted by R¹⁹;

R¹⁷ and R¹⁸ are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, haloalkylthio, alkoxy, hydroxy, amino, alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano;

R¹⁶ and R¹⁹ are selected from the group consisting of:

(i) hydrido, amidino, guanidino, carboxy, haloalkylthio, alkoxy, hydroxy, amino, alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano; and

(ii) NR²⁰R²¹ or C(NR²⁵)NR²³R²⁴, with the proviso that R¹⁶, R¹⁹, and Q^b are not simultaneously hydrido;

Q^b is selected from the group consisting of NR²⁰R²¹, hydrido, and C(NR²⁵)NR²³R²⁴, with the proviso that no more than one of R²⁰ and R²¹ is hydroxy at the same time and with the further proviso that no more than one of R²³ and R²⁴ is hydroxy at the same time;

R²⁰, R²¹, R²³, R²⁴, and R²⁵ are independently selected from the group consisting of hydrido, alkyl, and hydroxy;

Q^a is selected from the group consisting of a bond, CH₂, and CH₂CH₂.

91. The compound of claim 90 or a pharmaceutically acceptable salt thereof, wherein;

M is N or N→O;

B is selected from the group consisting of cyclopropyl, cyclobutyl, oxetan-3-yl, azetidin-1-yl, azetidin-2-yl, azetidin-3-yl, thiaetan-3-yl, cyclopentyl, cyclohexyl, norbornyl, 7-oxabicyclo[2.2.1]heptan-2-yl,

bicyclo[3.1.0]hexan-6-yl, cycloheptyl, 2-morpholinyl, 3-morpholinyl, 4-morpholinyl, 1-piperazinyl, 2-piperazinyl, 1-piperidinyl, 2-piperidinyl, 3-piperidinyl, 4-piperidinyl, 1-pyrrolidinyl, 2-pyrrolidinyl, 3-pyrrolidinyl, 2-dioxanyl, 4H-2-pyranyl, 4H-3-pyranyl, 4H-4-pyranyl, 4H-pyran-4-one-2-yl, 4H-pyran-4-one-3-yl, 2-tetrahydrofuranyl, 3-tetrahydrofuranyl, 2-tetrahydropyranyl, 3-tetrahydropyranyl, 4-tetrahydropyranyl, 2-tetrahydrothienyl, and 3-tetrahydrothienyl, wherein each ring carbon is optionally substituted with R³³, ring carbons and a nitrogen adjacent to the carbon atom at the point of attachment are optionally substituted with R⁹ or R¹³, a ring carbon or nitrogen adjacent to the R⁹ position and two atoms from the point of attachment is optionally substituted with R¹⁰, and a ring carbon or nitrogen adjacent to the R¹³ position and two atoms from the point of attachment is optionally substituted with R¹²;

R⁹, R¹¹, and R¹³ are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, methyl, ethyl, propyl, isopropyl, methoxy, ethoxy, isopropoxy, propoxy, hydroxy, amino, N-methylamino, N,N-dimethylamino, N-ethylamino, methylthio, ethylthio, isopropylthio, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, 2,2,3,3,3-pentafluoropropyl, trifluoromethoxy, 1,1,2,2-tetrafluoroethoxy, fluoro, chloro, bromo, methanesulfonamido, amidosulfonyl, N-methylamidosulfonyl, N,N-dimethylamidosulfonyl, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, 2,2,2-trifluoro-1-hydroxyethyl, amidocarbonyl, N-methylamidocarbonyl, N,N-dimethylamidocarbonyl, and cyano;

R¹⁰ and R¹² are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, carboxymethyl, methyl, ethyl, propyl, isopropyl, methoxy, ethoxy, isopropoxy, propoxy, hydroxy, amino,

methoxyamino, ethoxyamino, acetamido,
trifluoroacetamido, aminomethyl, 1-aminoethyl, 2-
aminoethyl, N-methylamino, dimethylamino, N-ethylamino,
methanesulfonamido, amidosulfonyl, N-methylamidosulfonyl,
5 N,N-dimethylamidosulfonyl, hydroxymethyl, 1-hydroxyethyl,
2-hydroxyethyl, 2,2,2-trifluoro-1-hydroxyethyl,
methoxycarbonyl, ethoxycarbonyl, amidocarbonyl, N-
methylamidocarbonyl, N,N-dimethylamidocarbonyl, N-
benzylamidocarbonyl, N-(2-chlorobenzyl)amidocarbonyl, N-
10 (3-fluorobenzyl)amidocarbonyl, N-(2-
trifluoromethylbenzyl)amidocarbonyl, N-(1-
phenylethyl)amidocarbonyl, N-(1-methyl-1-
phenylethyl)amidocarbonyl, N-benzylamidosulfonyl, N-(2-
chlorobenzyl)amidosulfonyl, N-ethylamidocarbonyl, N-
15 isopropylamidocarbonyl, N-propylamidocarbonyl, N-
isobutylamidocarbonyl, N-(2-butyl)amidocarbonyl, N-
cyclobutylamidocarbonyl, N-cyclopentylamidocarbonyl, N-
cyclohexylamidocarbonyl, fluoro, chloro, bromo, cyano,
cyclobutoxy, cyclohexoxy, cyclohexylmethoxy, 4-
20 trifluoromethylcyclohexylmethoxy, cyclopentoxy, benzyl,
benzyloxy, 4-bromo-3-fluorophenoxy, 3-bromobenzyloxy, 4-
bromobenzyloxy, 4-bromobenzylamino, 5-bromopyrid-2-
ylmethlamino, 4-butoxyphenamino, 3-chlorobenzyl, 4-
chlorophenoxy, 4-chloro-3-ethylphenoxy, 4-chloro-3-
25 ethylbenzylamino, 4-chloro-3-ethylphenylamino, 3-
chlorobenzyloxy, 4-chlorobenzyloxy, 4-
chlorobenzylsulfonyl, 4-chlorophenylamino, 4-
chlorophenylsulfonyl, 5-chloropyrid-3-yloxy, 2-
cyanopyrid-3-yloxy, 2,3-difluorobenzyloxy, 2,4-
30 difluorobenzyloxy, 3,4-difluorobenzyloxy, 2,5-
difluorobenzyloxy, 3,5-difluorophenoxy, 3,5-
difluorobenzyloxy, 4-difluoromethoxybenzyloxy, 2,3-
difluorophenoxy, 2,4-difluorophenoxy, 2,5-
difluorophenoxy, 3,5-dimethylphenoxy, 3,4-
35 dimethylphenoxy, 3,4-dimethylbenzyloxy, 3,5-
dimethylbenzyloxy, 4-ethoxyphenoxy, 4-ethylbenzyloxy, 3-

ethylphenoxy, 4-ethylaminophenoxy, 3-ethyl-5-methylphenoxy, 4-fluorobenzylloxy, 2-fluoro-3-trifluoromethylbenzylloxy, 3-fluoro-5-trifluoromethylbenzylloxy, 4-fluoro-2-trifluoromethylbenzylloxy, 4-fluoro-3-trifluoromethylbenzylloxy, 2-fluorophenoxy, 4-fluorophenoxy, 2-fluoro-3-trifluoromethylphenoxy, 2-fluorobenzylloxy, 4-fluorophenylamino, 2-fluoro-4-trifluoromethylphenoxy, 4-isopropylbenzylloxy, 3-isopropylphenoxy, 4-isopropylphenoxy, 4-isopropyl-3-methylphenoxy, 4-isopropylphenoxy, 4-isopropyl-3-methylphenoxy, phenylamino, 1-phenylethoxy, 2-phenylethoxy, 2-phenylethyl, 2-phenylethylamino, phenylsulfonyl, 3-trifluoromethoxybenzylloxy, 4-trifluoromethoxybenzylloxy, 3-trifluoromethoxyphenoxy, 4-trifluoromethoxyphenoxy, 3-trifluoromethylbenzylloxy, 4-trifluoromethylbenzylloxy, 2,4-bis-trifluoromethylbenzylloxy, 3-trifluoromethylbenzyl, 3,5-bis-trifluoromethylbenzylloxy, 4-trifluoromethylphenoxy, 3-trifluoromethylphenoxy, 3-trifluoromethylthiobenzylloxy, 4-trifluoromethylthiobenzylloxy, 2,3,4-trifluorophenoxy, 2,3,5-trifluorophenoxy, 3-pentafluoroethylphenoxy, 3-(1,1,2,2-tetrafluoroethoxy)phenoxy, and 3-trifluoromethylthiophenoxy;

R³³ is selected from the group consisting of hydrido, amidino, guanidino, carboxy, methoxy, ethoxy, isopropoxy, propoxy, hydroxy, amino, methoxyamino, ethoxyamino, acetamido, trifluoroacetamido, N-methylamino, dimethylamino, N-ethylamino, methylthio, ethylthio, isopropylthio, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, 2,2,3,3,3-pentafluoropropyl, trifluoromethoxy, 1,1,2,2-tetrafluoroethoxy, fluoro, chloro, bromo, amidosulfonyl, N-methylamidosulfonyl, N,N-dimethylamidosulfonyl, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, 2,2,2-trifluoro-1-hydroxyethyl,

methoxycarbonyl, ethoxycarbonyl, amidocarbonyl, N-methylamidocarbonyl, N,N-dimethylamidocarbonyl, cyano, and Q^b;

A is selected from the group consisting of a bond, NH, N(CH₃), N(OH), CH₂, CH₃CH, CF₃CH, NHC(O), N(CH₃)C(O), C(O)NH, C(O)N(CH₃), CH₂CH₂, CH₂CH₂CH₂, CH₃CHCH₂, and CF₃CHCH₂;

J^a is N or C-X⁰;

J^b is N or C-R¹;

R¹ and X⁰ are independently selected from the group consisting of hydrido, hydroxy, amino, amidino, hydroxyamino, aminomethyl, 1-aminoethyl, methylamino, dimethylamino, cyano, methyl, ethyl, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, methoxy, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, methoxyamino, methylthio, ethylthio, trifluoromethoxy, 1,1,2,2-tetrafluoroethoxy, fluoro, chloro, and bromo;

R² is Z⁰-Q;

Z⁰ is selected from the group consisting of a bond, CH₂, CH₂CH₂, O, S, NH, N(CH₃), OCH₂, SCH₂, N(H)CH₂, and N(CH₃)CH₂;

Q is selected from the group consisting of phenyl, 2-thienyl, 3-thienyl, 2-furyl, 3-furyl, 2-pyrrolyl, 3-pyrrolyl, 2-imidazolyl, 4-imidazolyl, 3-pyrazolyl, 4-pyrazolyl, 2-thiazolyl, 3-isoxazolyl, 5-isoxazolyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, 2-pyrazinyl, 2-pyrimidinyl, 4-pyrimidinyl, 5-pyrimidinyl, 3-pyridazinyl, 4-pyridazinyl, and 1,3,5-triazin-2-yl, wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to Z⁰ is optionally substituted by R⁹, the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R¹³, a carbon adjacent to R⁹ and two atoms from the carbon at the point of attachment is optionally substituted by R¹⁰, a carbon adjacent to R¹³ and two atoms from the carbon at the

point of attachment is optionally substituted by R¹², and any carbon adjacent to both R¹⁰ and R¹² is optionally substituted by R¹¹;

Y⁰ is selected from the group consisting of:

5 1-Q^b-4-Q^s-2-R¹⁶-3-R¹⁷-5-R¹⁸-6-R¹⁹benzene, 2-Q^b-5-Q^s-6-R¹⁷-4-R¹⁸-3-R¹⁹pyridine, 3-Q^b-6-Q^s-2-R¹⁶-5-R¹⁸-4-R¹⁹pyridine, 2-Q^b-5-Q^s-3-R¹⁶-6-R¹⁸pyrazine, 3-Q^b-6-Q^s-2-R¹⁸-5-R¹⁸-4-R¹⁹pyridazine, 2-Q^b-5-Q^s-4-R¹⁷-6-R¹⁸pyrimidine, 5-Q^b-2-Q^s-4-R¹⁶-6-R¹⁹pyrimidine, 3-Q^b-5-Q^s-4-R¹⁶-2-R¹⁹thiophene, 2-Q^b-5-10 Q^s-3-R¹⁶-4-R¹⁷thiophene, 3-Q^b-5-Q^s-4-R¹⁶-2-R¹⁹furan, 2-Q^b-5-Q^s-3-R¹⁶-4-R¹⁷furan, 3-Q^b-5-Q^s-4-R¹⁶-2-R¹⁹pyrrole, 2-Q^b-5-Q^s-3-R¹⁶-4-R¹⁷pyrrole, 4-Q^b-2-Q^s-5-R¹⁹imidazole, 2-Q^b-4-Q^s-5-15 R¹⁷imidazole, 3-Q^b-5-Q^s-4-R¹⁶isoxazole, 5-Q^b-3-Q^s-4-R¹⁶isoxazole, 2-Q^b-5-Q^s-4-R¹⁶pyrazole, 4-Q^b-2-Q^s-5-R¹⁹thiazole, and 2-Q^b-5-Q^s-4-R¹⁷thiazole;

R¹⁷ and R¹⁸ are independently selected from the group consisting of hydrido, methyl, ethyl, isopropyl, propyl, carboxy, amidino, guanidino, methoxy, ethoxy, isopropoxy, propoxy, hydroxy, amino, aminomethyl, 1-aminoethyl, 2-aminoethyl, N-methylamino, dimethylamino, N-ethylamino, methylthio, ethylthio, isopropylthio, trifluoromethylthio, methylsulfinyl, ethylsulfinyl, methylsulfonyl, ethylsulfonyl, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, 2,2,3,3,3-pentafluoropropyl, trifluoromethoxy, 1,1,2,2-tetrafluoroethoxy, fluoro, chloro, bromo, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, and cyano;

R¹⁶ and R¹⁹ are selected from the group consisting of:

(i) hydrido, methyl, ethyl, isopropyl, propyl, 30 carboxy, amidino, guanidino, methoxy, ethoxy, isopropoxy, propoxy, hydroxy, amino, aminomethyl, 1-aminoethyl, 2-aminoethyl, N-methylamino, dimethylamino, N-ethylamino, methylthio, ethylthio, isopropylthio, trifluoromethylthio, methylsulfinyl, ethylsulfinyl, trifluoromethyl, methylsulfonyl, ethylsulfonyl, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, 2,2,3,3,3-

pentafluoropropyl, trifluoromethoxy, 1,1,2,2-tetrafluoroethoxy, fluoro, chloro, bromo, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, and cyano; and

5 (ii) $C(NR^{25})NR^{23}R^{24}$ with the proviso that R^{16} , R^{19} , and Q^b are not simultaneously hydrido;

Q^b is $C(NR^{25})NR^{23}R^{24}$ or hydrido, with the proviso that no more than one of R^{23} and R^{24} is hydroxy at the same time;

10 R^{23} , R^{24} , and R^{25} are independently selected from the group consisting of hydrido, methyl, ethyl, and hydroxy;

Q^s is selected from the group consisting of a bond, CH_2 and CH_2CH_2 .

92. The compound of claim 91 or a pharmaceutically acceptable salt thereof, wherein;

15 M is $N\rightarrow O$;

B is selected from the group consisting of cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, oxalan-2-yl, 2-(2R)-bicyclo[2.2.1]-heptyl, 1-pyrrolidinyl, 1-piperidinyl, oxetan-3-yl, azetidin-1-yl, azetidin-2-yl, azetidin-3-yl, 7-oxabicyclo[2.2.1]heptan-2-yl, bicyclo[3.1.0]hexan-6-yl, 2-morpholinyl, 3-morpholinyl, 4-morpholinyl, 1-piperazinyl, 2-piperazinyl, 1-piperidinyl, 2-piperidinyl, 3-piperidinyl, 4-piperidinyl, 1-pyrrolidinyl, 2-pyrrolidinyl, 3-pyrrolidinyl, 2-dioxanyl, 4H-2-pyranyl, 4H-3-pyranyl, 4H-4-pyranyl, 4H-pyan-4-one-2-yl, 4H-pyan-4-one-3-yl, 2-tetrahydrofuran-3-yl, 3-tetrahydrofuran-2-yl, 2-tetrahydropyran-3-yl, 3-tetrahydropyran-2-yl, 2-tetrahydrothienyl, and 3-tetrahydrothienyl;

20 A is selected from the group consisting of a bond, CH_2 , $NHC(O)$, CH_2CH_2 , and $CH_2CH_2CH_2$;

25 Ja is N or $C-X^0$;

30 Jb is N or $C-R^1$;

35 R^1 and X^0 are independently selected from the group

consisting of hydrido, hydroxy, amino, amidino, hydroxyamino, aminomethyl, methylamino, cyano, methyl, trifluoromethyl, methoxy, hydroxymethyl, methoxyamino, methylthio, trifluoromethoxy, fluoro, and chloro;

5 R² is Z⁰-Q;

Z⁰ is selected from the group consisting of a bond, CH₂, O, S, NH, N(CH₃), OCH₂, and SCH₂;

Q is selected from the group consisting of 3-amidocarbonyl-5-aminophenyl, 3-amino-5-(N-benzylamidocarbonyl)phenyl, 3-amino-5-benzylphenyl, 3-amino-5-(2-phenylethyl)phenyl, 3-amino-5-benzylaminophenyl, 3-amino-5-(2-phenylethylamino)phenyl, 3-amino-5-benzyloxyphenyl, 3-amino-5-(2-phenylethoxy)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(3-fluorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-methyl-1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-benzylamidosulfonyl)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, 3-amino-5-(N-ethylamidocarbonyl)phenyl, 3-amino-5-(N-isopropylamidocarbonyl)phenyl, 3-amino-5-(N-propylamidocarbonyl)phenyl, 3-amino-5-(N-isobutylamidocarbonyl)phenyl, 3-amino-5-(N-(2-butyl)amidocarbonyl)phenyl, 3-amino-5-(N-cyclobutylamidocarbonyl)phenyl, 3-amino-5-(N-cyclopentylamidocarbonyl)phenyl, 3-amino-5-(N-cyclohexylamidocarbonyl)phenyl, 5-amino-2-fluorophenyl,

30 3-amino-5-hydroxymethylphenyl, 5-amino-3-methoxycarbonylphenyl, 3-amidinophenyl, 3-amino-2-methylphenyl, 5-amino-2-methylthiophenyl, 3-aminophenyl, 3-amino-5-(4-trifluoromethylbenzylamino)phenyl, 3-amino-5-(4-trifluoromethylbenzyloxy)phenyl, 3-carboxyphenyl, 3-carboxy-5-hydroxyphenyl, 3-amino-5-carboxyphenyl, 3-chlorophenyl, 2-chlorophenyl, 3-cyanophenyl, 3,5-

diaminophenyl, 3-dimethylaminophenyl, 2-fluorophenyl, 3-fluorophenyl, 2-hydroxyphenyl, 3-hydroxyphenyl, 3-methanesulfonylaminophenyl, 2-methoxyphenyl, 3-methoxyphenyl, 3-methoxyaminophenyl, 3-methoxycarbonylphenyl, 2-methylaminophenyl, 3-methylaminophenyl, 2-methylphenyl, 3-methylphenyl, 4-methylphenyl, phenyl, 3-trifluoroacetamidophenyl, 3-trifluoromethylphenyl, 2-trifluoromethylphenyl, 5-amino-2-thienyl, 5-amino-3-thienyl, 3-bromo-2-thienyl, 3-pyridyl, 4-pyridyl, 2-thienyl, and 3-thienyl;

Y⁰ is selected from the group consisting of:

1-Q^b-4-Q^s-2-R¹⁶-3-R¹⁷-5-R¹⁸-6-R¹⁹benzene, 2-Q^b-5-Q^s-6-R¹⁷-4-R¹⁸-3-R¹⁹pyridine, 3-Q^b-6-Q^s-2-R¹⁶-5-R¹⁸-4-R¹⁹pyridine, 3-Q^b-5-Q^s-4-R¹⁶-2-R¹⁹thiophene, and 2-Q^b-5-Q^s-3-R¹⁶-4-R¹⁷thiophene;

R¹⁶ and R¹⁹ are selected from the group consisting of:

(i) hydrido, amidino, amino, aminomethyl, methoxy, methylamino, hydroxy, hydroxymethyl, fluoro, chloro, and cyano;

(ii) C(NR²⁵)NR²³R²⁴ with the proviso that R¹⁶, R¹⁹, and Q^b are not simultaneously hydrido;

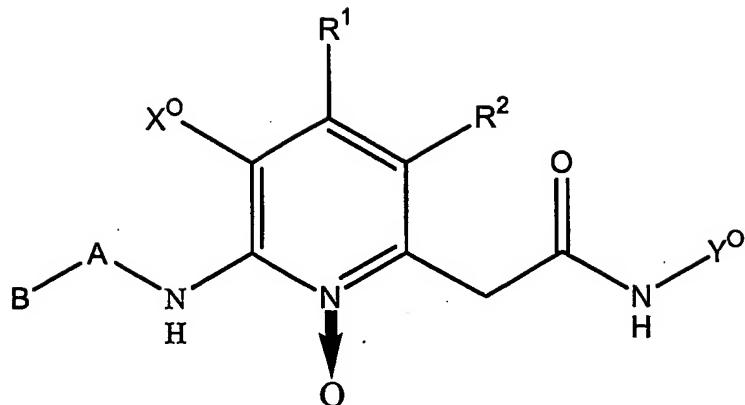
R¹⁷ and R¹⁸ are independently selected from the group consisting of hydrido, fluoro, chloro, hydroxy, hydroxymethyl, amino, carboxy, and cyano;

Q^b is C(NR²⁵)NR²³R²⁴ or hydrido;

R²³, R²⁴, and R²⁵ are independently hydrido or methyl;

Q^s is CH₂.

93. The compound of claim 90 having the structure:



or a pharmaceutically acceptable salt thereof, wherein;

B is a C3-C7 cycloalkyl or a C4-C6 saturated heterocyclyl, wherein each ring carbon is optionally substituted with R³³, a ring carbon other than the ring carbon at the point of attachment of B to A is optionally substituted with oxo provided that no more than one ring carbon is substituted by oxo at the same time, ring carbons and a nitrogen adjacent to the carbon atom at the point of attachment are optionally substituted with R⁹ or R¹³, a ring carbon or nitrogen adjacent to the R⁹ position and two atoms from the point of attachment is optionally substituted with R¹⁰, a ring carbon or nitrogen adjacent to the R¹³ position and two atoms from the point of attachment is optionally substituted with R¹², a ring carbon or nitrogen three atoms from the point of attachment and adjacent to the R¹⁰ position is optionally substituted with R¹¹, a ring carbon or nitrogen three atoms from the point of attachment and adjacent to the R¹² position is optionally substituted with R³³, and a ring carbon or nitrogen four atoms from the point of attachment and adjacent to the R¹¹ and R³³ positions is optionally substituted with R³⁴;

R⁹, R¹¹, and R¹³ are independently selected from the group consisting of hydrido, hydroxy, amino, amidino, guanidino, alkylamino, alkylthio, alkoxy, alkylsulfinyl,

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alkylsulfonyl, amidosulfonyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, carboxy, carboxamido, and cyano;

R¹⁰ and R¹² are independently selected from the group consisting of hydrido, acetamido, haloacetamido, amidino, guanidino, alkyl, alkoxy, alkoxyamino, hydroxy, amino, alkylamino, alkylsulfonamido, amidosulfonyl, hydroxyalkyl, aminoalkyl, halo, haloalkyl, carboalkoxy, carboxy, carboxamido, carboxyalkyl, and cyano;

R³⁴ is independently selected from the group consisting of hydrido, acetamido, haloacetamido, amidino, guanidino, alkoxy, hydroxy, amino, alkoxyamino, alkylamino, alkylthio, amidosulfonyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, carboalkoxy, carboxy, carboxamido, and cyano;

R³³ is selected from the group consisting of hydrido, acetamido, haloacetamido, amidino, guanidino, alkoxy, hydroxy, amino, alkoxyamino, alkylamino, alkylthio, amidosulfonyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, carboalkoxy, carboxy, carboxamido, cyano and Q^b;

A is a bond or (CH(R¹⁵))_{pa}-(W⁷)_{rr} wherein rr is 0 or 1, pa is an integer selected from 0 through 3, and W⁷ is N(R⁷);

R⁷ is hydrido or alkyl;

R¹⁵ is selected from the group consisting of hydrido, halo, alkyl, and haloalkyl;

R₁ and X^o are independently selected from the group consisting of hydrido, hydroxy, hydroxyamino, amidino, amino, cyano, hydroxyalkyl, alkoxy, alkyl, alkylamino, aminoalkyl, alkylthio, alkoxyamino, haloalkyl, haloalkoxy, and halo;

R² is Z⁰-Q;

Z⁰ is a bond;

Q is phenyl or a heteroaryl of 5 or 6 ring members, wherein a carbon adjacent to the carbon at the point of

attachment of said phenyl or heteroaryl ring to Z^0 is optionally substituted by R^9 , the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R^{13} , a carbon adjacent to R^9 and two atoms from the carbon at the point of attachment is optionally substituted by R^{10} , a carbon adjacent to R^{13} and two atoms from the carbon at the point of attachment is optionally substituted by R^{12} , and any carbon adjacent to both R^{10} and R^{12} is optionally substituted by R^{11} ;

Y^0 is phenyl or a heteroaryl of 5 or 6 ring members, wherein one carbon of said phenyl or said heteroaryl is substituted by Q^8 , a carbon two or three atoms from the point of attachment of Q^8 to said phenyl or said heteroaryl is substituted by Q^b , a carbon adjacent to the point of attachment of Q^8 is optionally substituted by R^{17} , another carbon adjacent to the point of attachment of Q^8 is optionally substituted by R^{18} , a carbon adjacent to Q^b is optionally substituted by R^{16} , and another carbon adjacent to Q^b is optionally substituted by R^{19} ;

R^{17} and R^{18} are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, haloalkylthio, alkoxy, hydroxy, amino, alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano;

R^{16} and R^{19} are selected from the group consisting of:

(i) hydrido, amidino, guanidino, carboxy, haloalkylthio, alkoxy, hydroxy, amino, alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano; and

(ii) $NR^{20}R^{21}$ or $C(NR^{25})NR^{23}R^{24}$, with the proviso that R^{16} , R^{19} , and Q^b are not simultaneously hydrido;

Q^b is selected from the group consisting of $NR^{20}R^{21}$, hydrido, and $C(NR^{25})NR^{23}R^{24}$;

R^{20} , R^{21} , R^{23} , R^{24} , and R^{25} are independently hydrido or

alkyl;

Q⁸ is CH₂.

94. The compound of claim 93 or a pharmaceutically acceptable salt thereof, wherein;

5 B is selected from the group consisting of cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, oxalan-2-yl, 2-(2R)-bicyclo[2.2.1]-heptyl, oxetan-3-yl, azetidin-1-yl, azetidin-2-yl, azetidin-3-yl, bicyclo[3.1.0]hexan-6-yl, 2-morpholinyl, 3-morpholinyl, 10 4-morpholinyl, 1-piperazinyl, 2-piperazinyl, 1-piperidinyl, 2-piperidinyl, 3-piperidinyl, 4-piperidinyl, 1-pyrrolidinyl, 2-pyrrolidinyl, 3-pyrrolidinyl, 2-dioxanyl, 2-tetrahydrofuranyl, 3-tetrahydrofuranyl, 2-tetrahydropyranyl, 3-tetrahydropyranyl, 4-tetrahydropyranyl, 2-tetrahydrothienyl, and 3-tetrahydrothienyl, wherein each ring carbon is optionally substituted with R³³, ring carbons and a nitrogen adjacent to the carbon atom at the point of attachment are optionally substituted with R⁹ or R¹³, a ring carbon or 15 nitrogen adjacent to the R⁹ position and two atoms from the point of attachment are optionally substituted with R¹⁰, and a ring carbon or nitrogen atom adjacent to the R¹³ position and two atoms from the point of attachment is optionally substituted with R¹²; R⁹, R¹¹, and R¹³ are 20 independently selected from the group consisting of hydrido, methyl, ethyl, methoxy, ethoxy, hydroxy, amino, N-methylamino, N,N-dimethylamino, methylthio, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, fluoro, chloro, bromo, amidosulfonyl, N- 25 methylamidosulfonyl, N,N-dimethylamidosulfonyl, hydroxymethyl, 1-hydroxyethyl, amidocarbonyl, N-methylamidocarbonyl, carboxy, and cyano; 30 R¹⁰ and R¹² are independently selected from the group consisting of hydrido, amidino, amidocarbonyl, N-methylamidocarbonyl, N-benzylamidocarbonyl, N-(2-

chlorobenzyl)amidocarbonyl, N-(3-fluorobenzyl)amidocarbonyl, N-(2-trifluoromethylbenzyl)amidocarbonyl, N-(1-phenylethyl)amidocarbonyl, N-(1-methyl-1-phenylethyl)amidocarbonyl, N-benzylamidosulfonyl, N-(2-chlorobenzyl)amidosulfonyl, N-ethylamidocarbonyl, N-isopropylamidocarbonyl, N-propylamidocarbonyl, N-isobutylamidocarbonyl, N-(2-butyl)amidocarbonyl, N-cyclobutylamidocarbonyl, N-cyclopentylamidocarbonyl, N-cyclohexylamidocarbonyl, guanidino, methyl, ethyl, methoxy, ethoxy, hydroxy, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, carboxy, carboxymethyl, amino, acetamido, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, trifluoroacetamido, aminomethyl, N-methylamino, dimethylamino, methoxyamino, amidosulfonyl, N-methylamidosulfonyl, N,N-dimethylamidosulfonyl, methanesulfonamido, methoxycarbonyl, fluoro, chloro, bromo, and cyano;

R³³ is selected from the group consisting of hydrido, amidino, guanidino, methyl, ethyl, methoxy, ethoxy, hydroxy, carboxy, amino, N-methylamino, dimethylamino, methoxyamino, methylthio, ethylthio, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, fluoro, chloro, bromo, amidosulfonyl, N-methylamidosulfonyl, hydroxymethyl, amidocarbonyl, cyano, and Q^b;

A is selected from the group consisting of a bond, NH, N(CH₃), CH₂, CH₃CH, CH₂CH₂, and CH₂CH₂CH₂;

X^o is selected from the group consisting of hydrido, hydroxy, amino, amidino, aminomethyl, cyano, methyl, trifluoromethyl, hydroxymethyl, chloro, and fluoro;

R¹ is selected from the group consisting of hydrido, hydroxy, hydroxymethyl, amino, aminomethyl, methylamino, cyano, methyl, trifluoromethyl, methoxy, methylthio, trifluoromethoxy, fluoro, and chloro;

R² is selected from the group consisting of phenyl, 2-thienyl, 2-furyl, 2-pyrrolyl, 2-imidazolyl, 2-

thiazolyl, 3-isoxazolyl, 2-pyridyl, and 3-pyridyl,
 wherein a carbon adjacent to the carbon at the point of
 attachment of said phenyl or heteroaryl ring to the
 pyridine ring is optionally substituted by R⁹, the other
 5 carbon adjacent to the carbon at the point of attachment
 is optionally substituted by R¹³, a carbon adjacent to R⁹
 and two atoms from the carbon at the point of attachment
 is optionally substituted by R¹⁰, a carbon adjacent to R¹³
 10 and two atoms from the carbon at the point of attachment
 is optionally substituted by R¹², and any carbon adjacent
 to both R¹⁰ and R¹² is optionally substituted by R¹¹;

Y⁰ is selected from the group consisting of:

15 1-Q^b-4-Q^s-2-R¹⁶-3-R¹⁷-5-R¹⁸-6-R¹⁹benzene, 2-Q^b-5-Q^s-6-R¹⁷-
 4-R¹⁸-3-R¹⁹pyridine, 2-Q^b-5-Q^s-3-R¹⁶-4-R¹⁷thiophene, 3-Q^b-6-
 Q^s-2-R¹⁶-5-R¹⁸-4-R¹⁹pyridine, 3-Q^b-5-Q^s-4-R¹⁶-2-R¹⁹thiophene,
 3-Q^b-5-Q^s-4-R¹⁶-2-R¹⁹furan, 2-Q^b-5-Q^s-3-R¹⁶-4-R¹⁷furan, 3-Q^b-5-
 Q^s-4-R¹⁶-2-R¹⁹pyrrole, 2-Q^b-5-Q^s-3-R¹⁶-4-R¹⁷pyrrole, 4-Q^b-2-Q^s-
 5-R¹⁹thiazole, and 2-Q^b-5-Q^s-4-R¹⁷thiazole;

20 R¹⁶, R¹⁷, R¹⁸, and R¹⁹ are independently selected from
 the group consisting of hydrido, methyl, ethyl, amidino,
 guanidino, methoxy, hydroxy, amino, aminomethyl, 1-
 aminoethyl, 2-aminoethyl, N-methylamino, dimethylamino,
 methylthio, ethylthio, trifluoromethylthio,
 methylsulfinyl, methylsulfonyl, trifluoromethyl,
 25 pentafluoroethyl, 2,2,2-trifluoroethyl, trifluoromethoxy,
 fluoro, chloro, hydroxymethyl, carboxy, and cyano;

Q^b is NR²⁰R²¹ or C(NR²⁵)NR²³R²⁴;

30 R²⁰, R²¹, R²³, R²⁴, and R²⁵ are independently selected
 from the group consisting of hydrido, methyl, and ethyl;

Q^s is CH₂.

95. The compound of claim 94 or a pharmaceutically
 acceptable salt thereof, wherein;

B is selected from the group consisting of
 cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, oxalan-
 35 2-yl, 2-(2R)-bicyclo[2.2.1]-heptyl, oxetan-3-yl,

azetidin-1-yl, azetidin-2-yl, azetidin-3-yl, 1-pyrrolidinyl and 1-piperidinyl;

A is selected from the group consisting of a bond, CH₂, CH₂CH₂ and CH₂CH₂CH₂;

5 X° is selected from the group consisting of hydrido, hydroxy, amino, amidino, aminomethyl, cyano, methyl, trifluoromethyl, hydroxymethyl, and fluoro;

10 R¹ is selected from the group consisting of hydrido, hydroxy, hydroxymethyl, amino, aminomethyl, cyano, methyl, trifluoromethyl, and fluoro;

R² is selected from the group consisting of 3-amidocarbonyl-5-aminophenyl, 3-amidocarbonyl-5-aminophenyl, 3-amino-5-(N-benzylamidocarbonyl)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(3-fluorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-methyl-1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-benzylamidosulfonyl)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, 3-amino-5-(N-ethylamidocarbonyl)phenyl, 3-amino-5-(N-isopropylamidocarbonyl)phenyl, 3-amino-5-(N-propylamidocarbonyl)phenyl, 3-amino-5-(N-isobutylamidocarbonyl)phenyl, 3-amino-5-(N-(2-butyl)amidocarbonyl)phenyl, 3-amino-5-(N-cyclobutylamidocarbonyl)phenyl, 3-amino-5-(N-cyclopentylamidocarbonyl)phenyl, 3-amino-5-(N-cyclohexylamidocarbonyl)phenyl, 5-amino-2-fluorophenyl, 3-amino-5-hydroxymethylphenyl, 5-amino-3-methoxycarbonylphenyl, 3-amidinophenyl, 3-amino-2-methylphenyl, 5-amino-2-methylthiophenyl, 3-aminophenyl, 3-carboxyphenyl, 3-carboxy-5-aminophenyl, 3-carboxy-5-hydroxyphenyl, 3-carboxymethyl-5-aminophenyl, 3-carboxymethyl-5-hydroxyphenyl, 3-carboxymethylphenyl, 3-chlorophenyl, 2-chlorophenyl, 3-cyanophenyl, 3,5-diaminophenyl, 3-dimethylaminophenyl, 2-fluorophenyl, 3-

fluorophenyl, 2,5-difluorophenyl, 2-hydroxyphenyl, 3-hydroxyphenyl, 3-methanesulfonylaminophenyl, 2-methoxyphenyl, 3-methoxyphenyl, 3-methoxyaminophenyl, 3-methoxycarbonylphenyl, 2-methylaminophenyl, 3-methylaminophenyl, 2-methylphenyl, 3-methylphenyl, 4-methylphenyl, phenyl, 3-trifluoroacetamidophenyl, 3-trifluoromethylphenyl, 2-trifluoromethylphenyl, 5-amino-2-thienyl, 5-amino-3-thienyl, 3-bromo-2-thienyl, 3-pyridyl, 4-pyridyl, 2-thienyl, and 3-thienyl;

Y⁰ is selected from the group consisting of:

1-Q^b-4-Q^s-2-R¹⁶-3-R¹⁷-5-R¹⁸-6-R¹⁹benzene, 2-Q^b-5-Q^s-6-R¹⁷-4-R¹⁸-3-R¹⁹pyridine, 3-Q^b-6-Q^s-2-R¹⁶-5-R¹⁸-4-R¹⁹pyridine, 3-Q^b-5-Q^s-4-R¹⁶-2-R¹⁹thiophene, and 2-Q^b-5-Q^s-3-R¹⁶-4-R¹⁷thiophene;

R¹⁶ and R¹⁹ are independently selected from the group consisting of hydrido, amidino, amino, aminomethyl, methoxy, methylamino, hydroxy, hydroxymethyl, fluoro, chloro, and cyano;

R¹⁷ and R¹⁸ are independently selected from the group consisting of hydrido, fluoro, chloro, hydroxy, hydroxymethyl, amino, carboxy, and cyano;

Q^b is C(NR²⁵)NR²³R²⁴;

R²³, R²⁴, and R²⁵ are independently hydrido or methyl;

Q^s is CH₂.

96. The compound of claim 95 or a pharmaceutically acceptable salt thereof, wherein;

B is selected from the group consisting of cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, oxalan-2-yl, 2-(2R)-bicyclo[2.2.1]-heptyl, oxetan-3-yl, azetidin-1-yl, azetidin-2-yl, azetidin-3-yl, and 1-piperidinyl;

A is selected from the group consisting of a bond, CH₂, CH₂CH₂ and CH₂CH₂CH₂;

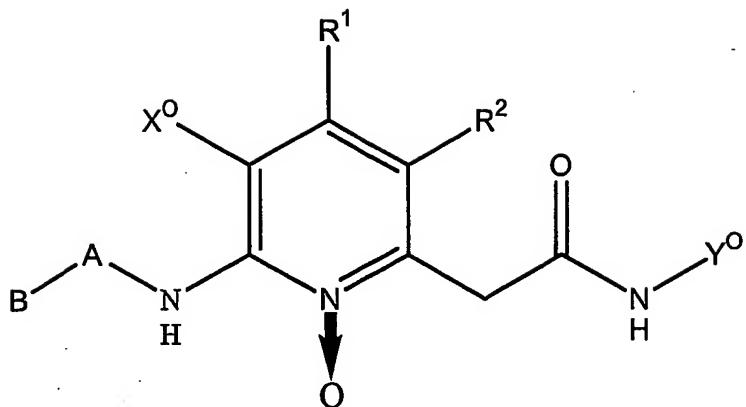
X⁰ is selected from the group consisting of hydrido, hydroxy, amino, amidino, aminomethyl, cyano, methyl, trifluoromethyl, hydroxymethyl, and fluoro;

R¹ is selected from the group consisting of hydrido, hydroxy, hydroxymethyl, amino, aminomethyl, cyano, methyl, trifluoromethyl, and fluoro;

R² is selected from the group consisting of 3-amidocarbonyl-5-aminophenyl, 3-amino-5-(N-benzylamidocarbonyl)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(3-fluorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-methyl-1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-benzylamidosulfonyl)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, 3-amino-5-(N-ethylamidocarbonyl)phenyl, 3-amino-5-(N-isopropylamidocarbonyl)phenyl, 3-amino-5-(N-propylamidocarbonyl)phenyl, 3-amino-5-(N-isobutylamidocarbonyl)phenyl, 3-amino-5-(N-(2-butyl)amidocarbonyl)phenyl, 3-amino-5-(N-cyclobutylamidocarbonyl)phenyl, 3-amino-5-(N-cyclopentylamidocarbonyl)phenyl, 3-amino-5-(N-cyclohexylamidocarbonyl)phenyl, 3-aminophenyl, 3-carboxy-5-aminophenyl, 3-chlorophenyl, 3,5-diaminophenyl, 3-dimethylaminophenyl, 3-hydroxyphenyl, 3-methanesulfonylaminophenyl, 3-methylaminophenyl, 2-methylphenyl, 3-methylphenyl, phenyl, 3-trifluoroacetamidophenyl, 3-bromo-2-thienyl, 2-thienyl, and 3-thienyl;

Y⁰ is selected from the group consisting of 5-amidino-2-thienylmethyl, 4-amidinobenzyl, 2-fluoro-4-amidinobenzyl, and 3-fluoro-4-amidinobenzyl.

97. The compound of claim 90 wherein the compound is selected from the group consisting of:



or a pharmaceutically acceptable salt thereof, wherein;

R^2 is 3-aminophenyl, B is cyclopropyl, A is a bond,

Y^0 is 4-amidinobenzyl, and R^1 is chloro;

R^2 is 3-aminophenyl, B is cyclobutyl, A is a bond, Y^0

5 is 4-amidino-2-fluorobenzyl, and R^1 is chloro;

R^2 is 3-aminophenyl, B is cyclobutyl, A is a bond, Y^0
is 4-amidinobenzyl, and R^1 is chloro;

R^2 is 3-aminophenyl, B is cyclopropyl, A is a bond,
 Y^0 is 4-amidino-2-fluorobenzyl, and R^1 is chloro;

10 R^2 is 3-aminophenyl, B is cyclobutyl, A is a bond, Y^0
is 4-amidinobenzyl, and R^1 is hydrido;

R^2 is 3-aminophenyl, B is cyclobutyl, A is a bond, Y^0
is 4-amidino-3-fluorobenzyl, and R^1 is chloro;

15 R^2 is 3-aminophenyl, B is cyclopentyl, A is a bond,
 Y^0 is 4-amidinobenzyl, and R^1 is chloro;

R^2 is 5-amino-2-thienyl, B is cyclobutyl, A is a
bond, Y^0 is 4-amidinobenzyl, and R^1 is chloro;

R^2 is 3-aminophenyl, B is cyclopropyl, A is CH_2 , Y^0 is
4-amidinobenzyl, and R^1 is chloro;

20 R^2 is 3-aminophenyl, B is 2-(2R)-bicyclo[2.2.1]-
heptyl, A is a bond, Y^0 is 4-amidinobenzyl, and R^1 is
chloro;

R^2 is 3-aminophenyl, B is cyclopentyl, A is a bond,
 Y^0 is 4-amidino-2-fluorobenzyl, and R^1 is chloro;

25 R^2 is 3-aminophenyl, B is cyclohexyl, A is CH_2CH_2 , Y^0
is 4-amidinobenzyl, and R^1 is hydrido;

R² is 3-aminophenyl, B is oxalan-2-yl, A is CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-aminophenyl, B is 1-piperidinyl, A is CH₂CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

5 R² is 3-aminophenyl, B is 1-pyrrolidinyl, A is CH₂CH₂CH₂, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-carbomethoxyphenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is hydrido;

10 R² is 3-amino-5-carboxyphenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is hydrido;

R² is 3,5-diaminophenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is hydrido;

R² is 2-amino-6-carboxy-4-pyridyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is hydrido;

15 R² is 3-amino-5-carbomethoxyphenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-carboxyphenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

20 R² is 3,5-diaminophenyl, B is cyclopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3,5-diaminophenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidino-2-fluorobenzyl, and R¹ is chloro;

R² is 3,5-diaminophenyl, B is cyclopropyl, A is a bond, Y⁰ is 4-amidino-2-fluorobenzyl, and R¹ is chloro;

25 R² is 3,5-diaminophenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is hydrido;

R² is 3,5-diaminophenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidino-3-fluorobenzyl, and R¹ is chloro;

30 R² is 3,5-diaminophenyl, B is cyclopentyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-carboxy-5-aminophenyl, B is cyclopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-carboxy-5-aminophenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidino-2-fluorobenzyl, and R¹ is chloro;

35 R² is 3-carboxy-5-aminophenyl, B is cyclopropyl, A is a bond, Y⁰ is 4-amidino-2-fluorobenzyl, and R¹ is chloro;

R² is 3-carboxy-5-aminophenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is hydrido;

R² is 3-carboxy-5-aminophenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidino-3-fluorobenzyl, and R¹ is chloro;

5 R² is 3-carboxy-5-aminophenyl, B is cyclopentyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is cyclopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

10 R² is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidino-2-fluorobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

15 R² is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is cyclopropyl, A is a bond, Y⁰ is 4-amidino-2-fluorobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is hydrido;

R² is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidino-3-fluorobenzyl, and R¹ is chloro;

25 R² is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is cyclopentyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, B is cyclopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

30 R² is 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidino-2-fluorobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, B is cyclopropyl, A is a bond, Y⁰ is 4-amidino-2-fluorobenzyl, and R¹ is chloro;

5 R² is 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is hydrido;

R² is 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidino-3-fluorobenzyl, and R¹ is chloro;

10 R² is 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, B is cyclopentyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

R² is 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)-phenyl, B is cyclopropyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

15 R² is 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)-phenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidino-2-fluorobenzyl, and R¹ is chloro;

20 R² is 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)-phenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is chloro;

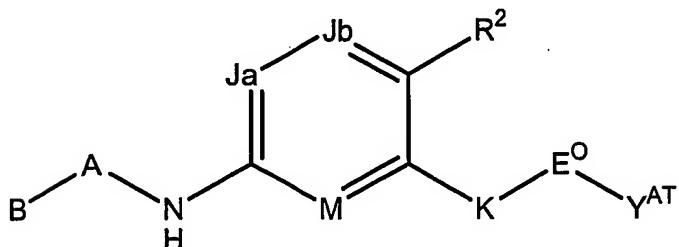
25 R² is 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)-phenyl, B is cyclopropyl, A is a bond, Y⁰ is 4-amidino-2-fluorobenzyl, and R¹ is chloro;

30 R² is 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)-phenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidinobenzyl, and R¹ is hydrido;

35 R² is 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)-phenyl, B is cyclobutyl, A is a bond, Y⁰ is 4-amidino-3-fluorobenzyl, and R¹ is chloro;

R^2 is 3-amino-5-(2-trifluoromethylbenzyl)amidocarbonyl)-phenyl, B is cyclopentyl, A is a bond, Y^0 is 4-amidinobenzyl, and R^1 is chloro.

5 98. The compound of claim 67 having the structure:



or a pharmaceutically acceptable salt thereof, wherein;

M is N or $N \rightarrow O$;

B is selected from the group consisting of:

(i) phenyl or a heteroaryl of 5 or 6 ring members,

10 wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to A is optionally substituted by R^{32} , the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R^{36} , a carbon adjacent to R^{32} and two atoms from the carbon at the point of attachment is optionally substituted by R^{33} , a carbon adjacent to R^{36} and two atoms from the carbon at the point of attachment is optionally substituted by R^{35} , and any carbon adjacent to both R^{33} and R^{35} is optionally substituted by R^{34} ;

20 (ii) hydrido, trialkylsilyl, C₂-C₈ alkyl, C₃-C₈ alkylenyl, C₃-C₈ alkenyl, C₃-C₈ alkynyl, and C₂-C₈ haloalkyl, wherein each member of group B is optionally substituted at any carbon up to and including 6 atoms from the point of attachment of B to A with one or more of the group consisting of R^{32} , R^{33} , R^{34} , R^{35} , and R^{36} ; and

25 (iii) C₃-C₁₂ cycloalkyl or a C₄-C₉ saturated heterocyclyl, wherein each ring carbon is optionally substituted with R^{33} , a ring carbon other than the ring carbon at the point of attachment of B to A is

optionally substituted with oxo provided that no more than one ring carbon is substituted by oxo at the same time, ring carbons and a nitrogen adjacent to the carbon atom at the point of attachment are optionally substituted with R⁹ or R¹³, a ring carbon or nitrogen adjacent to the R⁹ position and two atoms from the point of attachment is optionally substituted with R¹⁰, a ring carbon or nitrogen adjacent to the R¹³ position and two atoms from the point of attachment is optionally substituted with R¹², a ring carbon or nitrogen three atoms from the point of attachment and adjacent to the R¹⁰ position is optionally substituted with R¹¹, a ring carbon or nitrogen three atoms from the point of attachment and adjacent to the R¹² position is optionally substituted with R³³, and a ring carbon or nitrogen four atoms from the point of attachment and adjacent to the R¹¹ and R³³ positions is optionally substituted with R³⁴;

R³², R³³, R³⁴, R³⁵, and R³⁶ are independently selected from the group consisting of hydrido, acetamido, haloacetamido, amidino, guanidino, alkylenedioxy, haloalkylthio, alkanoyloxy, alkoxy, hydroxy, amino, alkoxyamino, haloalkanoyl, nitro, alkylamino, alkylthio, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heterocyclyl, alkylsulfonamido, amidosulfonyl, alkyl, alkenyl, halo, haloalkyl, haloalkenyl, haloalkoxy, hydroxyalkyl, alkylamino, carboalkoxy, carboxy, carboxamido, cyano, and Q^b;

R⁹, R¹⁰, R¹¹, R¹², and R¹³ are independently selected from the group consisting of hydrido, acetamido, haloacetamido, alkoxyamino, alkanoyl, haloalkanoyl, amidino, guanidino, alkylenedioxy, haloalkylthio, alkoxy, cycloalkoxy, cycloalkylalkoxy, aralkoxy, aryloxy, heteroaryloxy, heteroaralkoxy, heterocyclxyoxy, heterocyclylalkoxy, hydroxy, amino, alkylamino, N-alkyl-N-arylamino, arylamino, aralkylamino, heteroarylarnino, heteroaralkylamino, heterocyclylamino,

heterocyclalkylamino, alkylthio, alkylsulfinyl,
 arylsulfinyl, aralkylsulfinyl, cycloalkylsulfinyl,
 heteroarylsulfinyl, alkylsulfamido, alkylsulfonyl,
 arylsulfonyl, aralkylsulfonyl, cycloalkylsulfonyl,
 5 heteroarylsulfonyl, amidosulfonyl, alkyl, aryl, aralkyl,
 cycloalkyl, cycloalkylalkyl, heteroaryl, heterocyclyl,
 halo, haloalkyl, haloalkoxy, hydroxyalkyl,
 hydroxyhaloalkyl, aminoalkyl, carboalkoxy, carboxy,
 carboxyalkyl, carboxamido, and cyano;

10 A is a bond or $(CH(R^{15}))_{pa}-(W^7)_{rr}$ wherein rr is 0 or 1,
 pa is an integer selected from 0 through 3, and W⁷ is
 selected from the group consisting of O, S, C(O),
 $(R^7)NC(O)$, $(R^7)NC(S)$, and $N(R^7)$;

15 R⁷ is selected from the group consisting of hydrido,
 hydroxy and alkyl;

R¹⁵ is selected from the group consisting of hydrido,
 hydroxy, halo, alkyl, and haloalkyl;

Ja is N or C-X⁰;

Jb is N or C-R¹;

20 R¹ and X⁰ are independently selected from the group
 consisting of hydrido, alkyl, cyano, halo, haloalkyl,
 haloalkoxy, amino, aminoalkyl, alkylamino, amidino,
 hydroxy, hydroxyamino, alkoxy, hydroxyalkyl, alkoxyamino,
 thiol, and alkylthio;

25 R² is Z⁰-Q;

Z⁰ is selected from the group consisting of:

(i) a bond, $(CR^{41}R^{42})_q$ wherein q is 1 or 2, and
 $(CH(R^{41}))_g-W^0-(CH(R^{42}))_p$, wherein g and p are integers
 independently selected from 0 through 3 and W⁰ is selected
 30 from the group consisting of O, S, C(O), S(O), N(R⁴¹), and
 $ON(R^{41})$; and

(ii) $(CH(R^{41}))_e-W^{22}-(CH(R^{42}))_h$ wherein e and h are
 independently 0 or 1 and W²² is selected from the group
 consisting of $CR^{41}=CR^{42}$, 1,2-cyclopropyl, 1,2-cyclobutyl,
 35 1,2-cyclohexyl, 1,3-cyclohexyl, 1,2-cyclopentyl, 1,3-
 cyclopentyl, 2,3-morpholinyl, 2,4-morpholinyl, 2,6-

5 morpholinyl, 3,4-morpholinyl, 3,5-morpholinyl, 1,2-piperazinyl, 1,3-piperazinyl, 2,3-piperazinyl, 2,6-piperazinyl, 1,2-piperidinyl, 1,3-piperidinyl, 2,3-piperidinyl, 2,4-piperidinyl, 2,6-piperidinyl, 3,4-piperidinyl, 1,2-pyrrolidinyl, 1,3-pyrrolidinyl, 2,3-pyrrolidinyl, 2,4-pyrrolidinyl, 2,5-pyrrolidinyl, 3,4-pyrrolidinyl, 2,3-tetrahydrofuranyl, 2,4-tetrahydrofuranyl, 2,5-tetrahydrofuranyl, and 3,4-tetrahydrofuranyl, wherein Z^0 is directly bonded to the pyridine ring and W^{22} is optionally substituted with one or more substituents selected from the group consisting of R^9 , R^{10} , R^{11} , R^{12} , and R^{13} ; R^{41} and R^{42} are independently selected from the group consisting of hydrido, hydroxy, alkyl, and amino;

10 15 Q is selected from the group consisting of:

(i) phenyl or a heteroaryl of 5 or 6 ring members, wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to Z^0 is optionally substituted by R^9 , the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R^{13} , a carbon adjacent to R^9 and two atoms from the carbon at the point of attachment is optionally substituted by R^{10} , a carbon adjacent to R^{13} and two atoms from the carbon at the point of attachment is optionally substituted by R^{12} , and any carbon adjacent to both R^{10} and R^{12} is optionally substituted by R^{11} , with the proviso that Q is other than a phenyl when Z^0 is a bond; and

20 25 30 (ii) hydrido with the proviso that Z^0 is selected from other than a bond;

35 K is CHR^{4a} wherein R^{4a} is selected from the group consisting of hydrido, hydroxyalkyl, alkyl, alkoxyalkyl, alkylthioalkyl, and haloalkyl;

E^0 is selected from the group consisting of a bond, $C(O)N(H)$, $(H)NC(O)$, $(R^7)NS(O)_2$, and $S(O)_2N(R^7)$;

35 Y^{AT} is Q^b-Q^S ;

Q^S is $(CR^{37}R^{38})_b$, wherein b is an integer selected from

1 through 4, R³⁷ is selected from the group consisting of hydrido, alkyl, and haloalkyl, and R³⁸ is selected from the group consisting of hydrido, alkyl, haloalkyl, aroyl, and heteroaroyl with the proviso that there is at least one aroyl or heteroaroyl substituent, with the further proviso that no more than one aroyl or heteroaroyl is bonded to (CR³⁷R³⁸)_b at the same time, with the still further proviso that said aroyl and said heteroaroyl are optionally substituted with one or more substituents selected from the group consisting of R¹⁶, R¹⁷, R¹⁸, and R¹⁹, with another further proviso that said aroyl and said heteroaroyl are bonded to the CR³⁷R³⁸ that is directly bonded to E⁰, with still another further proviso that no more than one alkyl or one haloalkyl is bonded to a CR³⁷R³⁸ at the same time, and with the additional proviso that said alkyl and haloalkyl are bonded to a carbon other than the one bonding said aroyl or said heteroaroyl;

R¹⁷ and R¹⁸ are independently selected from the group consisting of hydrido, amidino, guanidino, carboxy, haloalkylthio, alkoxy, hydroxy, amino, alkoxyamino, alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano;

R¹⁶ or R¹⁹ are selected from the group consisting of:

(i) hydrido, amidino, guanidino, carboxy, haloalkylthio, alkoxy, hydroxy, amino, alkoxyamino, alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, alkanoyl, haloalkanoyl, alkyl, halo, haloalkyl, haloalkoxy, hydroxyalkyl, aminoalkyl, and cyano; and

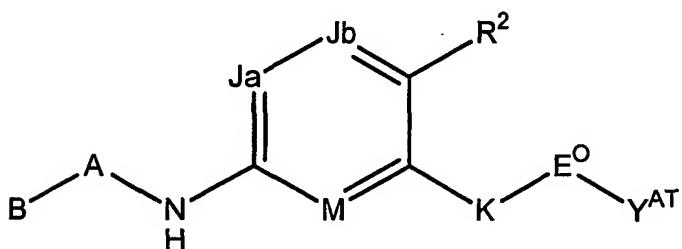
(ii) NR²⁰R²¹, N(R²⁶)C(NR²⁵)N(R²³)(R²⁴), and C(NR²⁵)NR²³R²⁴, with the proviso that R¹⁶, R¹⁹, and Q^b are not simultaneously hydrido;

Q^b is selected from the group consisting of NR²⁰R²¹, hydrido, N(R²⁶)C(NR²⁵)N(R²³)(R²⁴), and C(NR²⁵)NR²³R²⁴, with the proviso that no more than one of R²⁰ and R²¹ is selected from the group consisting of hydroxy, amino, alkylamino,

and dialkylamino at the same time and with the further proviso that no more than one of R²³ and R²⁴ is selected from the group consisting of hydroxy, amino, alkylamino, and dialkylamino at the same time;

5 R²⁰, R²¹, R²³, R²⁴, R²⁵, and R²⁶ are independently selected from the group consisting of hydrido, alkyl, hydroxy, amino, alkylamino and dialkylamino.

99. The compound of claim 98 having the structure:



or a pharmaceutically acceptable salt thereof, wherein;

10 M is N or N→O;

B is selected from the group consisting of:

(i) phenyl, 2-thienyl, 3-thienyl, 2-furyl, 3-furyl, 2-pyrrolyl, 3-pyrrolyl, 2-imidazolyl, 4-imidazolyl, 3-pyrazolyl, 4-pyrazolyl, 2-thiazolyl, 3-isoxazolyl, and 5-isoxazolyl, wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to A is optionally substituted by R³², the other carbon adjacent to the carbon at the point of attachment is

15 optionally substituted by R³⁶, a carbon adjacent to R³² and two atoms from the carbon at the point of attachment is optionally substituted by R³³, a carbon adjacent to R³⁶ and two atoms from the carbon at the point of attachment is optionally substituted by R³⁵, and any carbon adjacent to both R³³ and R³⁵ is optionally substituted by R³⁴;

20 (ii) hydrido, ethyl, 2-propenyl, 2-propynyl, propyl, isopropyl, butyl, 2-butenyl, 2-butynyl, sec-butyl, tert-butyl, isobutyl, 2-methylpropenyl, 1-pentyl, 2-pentenyl, 3-pentenyl, 2-pentynyl, 3-pentynyl, 2-pentyl, 3-pentyl,

2-methylbutyl, 2-methyl-2-butenyl, 3-methylbutyl, 3-methyl-2-butenyl, 1-hexyl, 2-hexenyl, 3-hexenyl, 4-hexenyl, 2-hexynyl, 3-hexynyl, 4-hexynyl, 2-hexyl, 1-methyl-2-pentenyl, 1-methyl-3-pentenyl, 1-methyl-2-pentynyl, 1-methyl-3-pentynyl, 3-hexyl, 1-ethyl-2-butenyl, 1-heptyl, 2-heptenyl, 3-heptenyl, 4-heptenyl, 5-heptenyl, 2-heptynyl, 3-heptynyl, 4-heptynyl, 5-heptynyl, 2-heptyl, 1-methyl-2-hexenyl, 1-methyl-3-hexenyl, 1-methyl-4-hexenyl, 1-methyl-2-hexynyl, 1-methyl-3-hexynyl, 1-methyl-4-hexynyl, 3-heptyl, 1-ethyl-2-pentenyl, 1-ethyl-3-pentenyl, 1-ethyl-2-pentynyl, 1-ethyl-3-pentynyl, 2,2,2-trifluoroethyl, 2,2-difluoropropyl, 4-trifluoromethyl-5,5-trifluoropentyl, 4-trifluoromethylpentyl, 5,5,6,6,6-pentafluorohexyl, and 3,3,3-trifluoropropyl, wherein each member of group B is optionally substituted at any carbon up to and including 5 atoms from the point of attachment of B to A with one or more of the group consisting of R³², R³³, R³⁴, R³⁵, and R³⁶; and

(iii) cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, oxalan-2-yl, 2-(2R)-bicyclo[2.2.1]-heptyl, oxetan-3-yl, azetidin-1-yl, azetidin-2-yl, azetidin-3-yl, bicyclo[3.1.0]hexan-6-yl, 2-morpholinyl, 3-morpholinyl, 4-morpholinyl, 1-piperazinyl, 2-piperazinyl, 1-piperidinyl, 2-piperidinyl, 3-piperidinyl, 4-piperidinyl, 1-pyrrolidinyl, 2-pyrrolidinyl, 3-pyrrolidinyl, 2-dioxanyl, 2-tetrahydrofuranyl, 3-tetrahydrofuranyl, 2-tetrahydropyranyl, 3-tetrahydropyranyl, 4-tetrahydropyranyl, 2-tetrahydrothienyl, and 3-tetrahydrothienyl, wherein each ring carbon is optionally substituted with R³³, ring carbons and a nitrogen adjacent to the carbon atom at the point of attachment are optionally substituted with R⁹ or R¹³, a ring carbon or nitrogen adjacent to the R⁹ position and two atoms from the point of attachment is optionally substituted with

R¹⁰, and a ring carbon or nitrogen adjacent to the R¹³ position and two atoms from the point of attachment is optionally substituted with R¹²;

R³², R³³, R³⁴, R³⁵, and R³⁶ are independently selected from the group consisting of hydrido, amidino, guanidino, methyl, ethyl, methoxy, ethoxy, hydroxy, amino, N-methylamino, dimethylamino, methoxyamino, methylthio, ethylthio, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, fluoro, chloro, bromo, amidosulfonyl, N-methylamidosulfonyl, hydroxymethyl, amidocarbonyl, carboxy, cyano, and Q^b;

R⁹, R¹¹, and R¹³ are independently selected from the group consisting of hydrido, methyl, ethyl, methoxy, ethoxy, hydroxy, amino, N-methylamino, N,N-dimethylamino, methylthio, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, fluoro, chloro, bromo, amidosulfonyl, N-methylamidosulfonyl, N,N-dimethylamidosulfonyl, hydroxymethyl, 1-hydroxyethyl, amidocarbonyl, N-methylamidocarbonyl, carboxy, and cyano;

R¹⁰ and R¹² are independently selected from the group consisting of hydrido, amidino, amidocarbonyl, N-methylamidocarbonyl, N-benzylamidocarbonyl, N-(2-chlorobenzyl)amidocarbonyl, N-(3-fluorobenzyl)amidocarbonyl, N-(2-trifluoromethylbenzyl)amidocarbonyl, N-(1-phenylethyl)amidocarbonyl, N-(1-methyl-1-phenylethyl)amidocarbonyl, N-benzylamidosulfonyl, N-(2-chlorobenzyl)amidosulfonyl, N-ethylamidocarbonyl, N-isopropylamidocarbonyl, N-propylamidocarbonyl, N-isobutylamidocarbonyl, N-(2-butyl)amidocarbonyl, N-cyclobutylamidocarbonyl, N-cyclopentylamidocarbonyl, N-cyclohexylamidocarbonyl, guanidino, methyl, ethyl, methoxy, ethoxy, hydroxy, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, carboxy, carboxymethyl, amino, acetamido, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, trifluoroacetamido, aminomethyl, N-methylamino,

dimethylamino, methoxyamino, amidosulfonyl, N-methylamidosulfonyl, N,N-dimethylamidosulfonyl, methanesulfonamido, methoxycarbonyl, fluoro, chloro, bromo, and cyano;

5 A is selected from the group consisting of a bond, NH, N(CH₃), CH₂, CH₃CH, CH₂CH₂, and CH₂CH₂CH₂;

Ja is N or C-X⁰;

Jb is N or C-R¹;

10 R¹ and X⁰ are independently selected from the group consisting of hydrido, hydroxy, hydroxymethyl, amino, aminomethyl, methylamino, cyano, methyl, trifluoromethyl, methoxy, methylthio, trifluoromethoxy, fluoro, and chloro;

15 R² is selected from the group consisting of phenyl, 2-thienyl, 2-furyl, 2-pyrrolyl, 2-imidazolyl, 2-thiazolyl, 3-isoxazolyl, 2-pyridyl, and 3-pyridyl, wherein a carbon adjacent to the carbon at the point of attachment of said phenyl or heteroaryl ring to the pyridine ring is optionally substituted by R⁹, the other carbon adjacent to the carbon at the point of attachment is optionally substituted by R¹³, a carbon adjacent to R⁹ and two atoms from the carbon at the point of attachment is optionally substituted by R¹⁰, a carbon adjacent to R¹³ and two atoms from the carbon at the point of attachment is optionally substituted by R¹², and any carbon adjacent to both R¹⁰ and R¹² is optionally substituted by R¹¹;

20

25 Y^{AT} is Q^b-Q^a;

Q^a is selected from the group consisting of:

30 C[R³⁷(benzoyl)(CR³⁷R³⁸)_b], C[R³⁷(2-pyridylcarbonyl)(CR³⁷R³⁸)_b], C[R³⁷(3-pyridylcarbonyl)(CR³⁷R³⁸)_b], C[R³⁷(4-pyridylcarbonyl)(CR³⁷R³⁸)_b], C[R³⁷(2-thienylcarbonyl)(CR³⁷R³⁸)_b], C[R³⁷(3-thienylcarbonyl)(CR³⁷R³⁸)_b], C[R³⁷(2-thiazolylcarbonyl)(CR³⁷R³⁸)_b], C[R³⁷(4-thiazolylcarbonyl)(CR³⁷R³⁸)_b], and C[R³⁷(5-thiazolylcarbonyl)(CR³⁷R³⁸)_b], wherein b is an integer

selected from 1 through 3, R³⁷ and R³⁸ are independently selected from the group consisting of hydrido, alkyl, and haloalkyl, with the proviso that said benzoyl and the heteroaroyls are optionally substituted with one or more substituents selected from the group consisting of R¹⁶, 5 R¹⁷, R¹⁸, and R¹⁹ with the proviso that R¹⁷ and R¹⁸ are optionally substituted at a carbon selected from other than the meta and para carbons relative to the carbonyl of the benzoyl or heteroaroyl, with the further proviso 10 that said benzoyl or said heteroaroyl are bonded to the carbon directly bonded to amide nitrogen of the 1-(amidocarbonylmethylene) group, and with the still further proviso that is no more than one alkyl or one haloalkyl is bonded to a CR³⁷R³⁸ at the same time;

R¹⁶, R¹⁷, R¹⁸, and R¹⁹ are independently selected from the group consisting of hydrido, methyl, ethyl, amidino, guanidino, methoxy, hydroxy, amino, aminomethyl, 1-aminoethyl, 2-aminoethyl, N-methylamino, dimethylamino, 15 methylthio, ethylthio, trifluoromethylthio, methylsulfinyl, methylsulfonyl, trifluoromethyl, pentafluoroethyl, 2,2,2-trifluoroethyl, trifluoromethoxy, fluoro, chloro, hydroxymethyl, carboxy, and cyano;

Q^b is C(NR²⁵)NR²³R²⁴ or N(R²⁶)C(NR²⁵)N(R²³)(R²⁴); and

R²³, R²⁴, R²⁵, and R²⁶ are independently selected from 20 the group consisting of hydrido, methyl, and ethyl.

100. The compound of claim 99 or a pharmaceutically acceptable salt thereof, wherein;

M is N→O;

B is selected from the group consisting of:

(i) 2-aminophenyl, 3-aminophenyl, 3-amidinophenyl, 30 4-amidinophenyl, 3-carboxyphenyl, 3-carboxy-5-hydroxyphenyl, 3-chlorophenyl, 4-chlorophenyl, 3,4-dichlorophenyl, 2-fluorophenyl, 3-fluorophenyl, 3,4-difluorophenyl, 3-hydroxyphenyl, 4-hydroxyphenyl, 3-methoxyaminophenyl, 3-methoxyphenyl, 4-methoxyphenyl, 35 3-

methylphenyl, 4-methylphenyl, phenyl, 3-trifluoromethylphenyl, 2-imidazoyl, 2-pyridyl, 3-pyridyl, 5-chloro-3-trifluoromethyl-2-pyridyl, 4-pyridyl, 2-thienyl, 3-thienyl, and 3-trifluoromethyl-2-pyridyl;

5 (ii) hydrido, ethyl, 2-propenyl, 2-propynyl, propyl, isopropyl, butyl, 2-butyl, (R)-2-butyl, (S)-2-butyl, tert-butyl, isobutyl, 1-pentyl, 3-pentyl, 2-methylbutyl, 2,2,2-trifluoroethyl, 6-amidocarbonylhexyl, 4-methyl-2-pentyl, 3-hydroxypropyl, 1-methoxy-2-propyl, 2-methoxyethyl, 2-methyl-2-butyl, 3-methyl-2-butyl, 2-dimethylaminopropyl, 2-cyanoethyl, 6-hydroxyhexyl, 2-hydroxyethyl, 2-amidinoethyl, 2-guanidinoethyl, 3-guanidinopropyl, 4-guanidinobutyl, 3-hydroxypropyl, 4-hydroxybutyl, 6-cyanohexyl, 2-dimethylaminoethyl, 3-methylbutyl, 2-methylbutyl, (S)-2-methylbutyl, 3-aminopropyl, 2-hexyl, and 4-aminobutyl; and

10 (iii) cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, oxalan-2-yl, 2-(2R)-bicyclo[2.2.1]-heptyl, oxetan-3-yl, azetidin-1-yl, azetidin-2-yl, azetidin-3-yl, 1-pyrrolidinyl and 1-piperidinyl;

A is selected from the group consisting of a bond, CH₂, CH₃CH, CH₂CH₂, and CH₂CH₂CH₂;

Ja is N or C-X⁰;

Jb is N or C-R¹;

25 R¹ and X⁰ are independently selected from the group consisting of hydrido, hydroxy, hydroxymethyl, amino, aminomethyl, cyano, methyl, trifluoromethyl, fluoro, and chloro;

30 R² is selected from the group consisting of 3-amidocarbonyl-5-aminophenyl, 3-amidocarbonyl-5-aminophenyl, 3-amino-5-(N-benzylamidocarbonyl)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(3-fluorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-methyl-1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-

benzylamidosulfonyl)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, 3-amino-5-(N-ethylamidocarbonyl)phenyl, 3-amino-5-(N-isopropylamidocarbonyl)phenyl, 3-amino-5-(N-propylamidocarbonyl)phenyl, 3-amino-5-(N-isobutylamidocarbonyl)phenyl, 3-amino-5-(N-(2-butyl)amidocarbonyl)phenyl, 3-amino-5-(N-cyclobutylamidocarbonyl)phenyl, 3-amino-5-(N-cyclopentylamidocarbonyl)phenyl, 3-amino-5-(N-cyclohexylamidocarbonyl)phenyl, 5-amino-2-fluorophenyl, 3-amino-5-hydroxymethylphenyl, 5-amino-3-methoxycarbonylphenyl, 3-amidinophenyl, 3-amino-2-methylphenyl, 5-amino-2-methylthiophenyl, 3-aminophenyl, 3-carboxyphenyl, 3-carboxy-5-aminophenyl, 3-carboxy-5-hydroxyphenyl, 3-carboxymethyl-5-aminophenyl, 3-carboxymethyl-5-hydroxyphenyl, 3-carboxymethylphenyl, 3-chlorophenyl, 2-chlorophenyl, 3-cyanophenyl, ,5-diaminophenyl, 3-dimethylaminophenyl, 2-fluorophenyl, 3-fluorophenyl, 2,5-difluorophenyl, 2-hydroxyphenyl, 3-hydroxyphenyl, 3-methanesulfonylaminophenyl, 2-methoxyphenyl, 3-methoxyphenyl, 3-methoxyaminophenyl, 3-methoxycarbonylphenyl, 2-methylaminophenyl, 3-methylaminophenyl, 2-methylphenyl, 3-methylphenyl, 4-methylphenyl, phenyl, 3-trifluoroacetamidophenyl, 3-trifluoromethylphenyl, 2-trifluoromethylphenyl, 5-amino-2-thienyl, 5-amino-3-thienyl, 3-bromo-2-thienyl, 3-pyridyl, 4-pyridyl, 2-thienyl, and 3-thienyl;

Y^A is Q^b-Q^s ;

Q^s is selected from the group consisting of:

[CH(benzoyl)](CH₂)_b, [CH(2-pyridylcarbonyl)](CH₂)_b,
[CH(3-pyridylcarbonyl)](CH₂)_b, [CH(4-pyridylcarbonyl)](CH₂)_b, [CH(2-thienylcarbonyl)](CH₂)_b, [CH(3-thienylcarbonyl)](CH₂)_b,
[CH(2-thiazolylcarbonyl)](CH₂)_b, [CH(4-thiazolylcarbonyl)](CH₂)_b, and [CH(5-thiazolylcarbonyl)](CH₂)_b, wherein b is an integer

selected from 1 through 3, with the proviso that said benzoyl and said heteroaroyls are optionally substituted with one or more substituents selected from the group consisting of R¹⁶, R¹⁷, R¹⁸, and R¹⁹ with the proviso that R¹⁷ and R¹⁸ are optionally substituted at a carbon selected from other than the meta and para carbons relative to the carbonyl of the benzoyl or the heteroaroyl, and that said benzoyl or said heteroaroyl are bonded to the carbon directly bonded to amide nitrogen of the 1-(amidocarbonylmethylene) group;

R¹⁶ and R¹⁹ are independently selected from the group consisting of hydrido, amidino, amino, aminomethyl, methoxy, methylamino, hydroxy, hydroxymethyl, fluoro, chloro, and cyano;

R¹⁷ and R¹⁸ are independently selected from the group consisting of hydrido, fluoro, chloro, hydroxy, hydroxymethyl, amino, carboxy, and cyano;

Q^b is N(R²⁶)C(NR²⁵)N(R²³)(R²⁴);

R²³, R²⁴, R²⁵, and R²⁶ are independently hydrido or methyl.

101. The compound of claim 100 or a pharmaceutically acceptable salt thereof, wherein;

M is N→O;

B is selected from the group consisting of:

(i) 3-aminophenyl, 3-amidinophenyl, 4-amidinophenyl, 3-chlorophenyl, 4-chlorophenyl, 3,4-dichlorophenyl, 2-fluorophenyl, 4-methylphenyl, phenyl, 2-imidazoyl, 3-pyridyl, 4-pyridyl, and 3-trifluoromethyl-2-pyridyl;

(ii) hydrido, ethyl, 2-propenyl, 2-propynyl, propyl, isopropyl, butyl, 2-butyl, (R)-2-butyl, (S)-2-butyl, tert-butyl, isobutyl, 1-pentyl, 3-pentyl, 2-methylbutyl, 2,2,2-trifluoroethyl, 6-amidocarbonylhexyl, 4-methyl-2-pentyl, 3-hydroxypropyl, 1-methoxy-2-propyl, 2-methoxyethyl, 2-methyl-2-butyl, 3-methyl-2-butyl, 2-

dimethylaminopropyl, 2-cyanoethyl, 6-hydroxyhexyl, 2-hydroxyethyl, 2-amidinoethyl, 2-guanidinoethyl, 3-guanidinopropyl, 4-guanidinobutyl, 3-hydroxypropyl, 4-hydroxybutyl, 6-cyanoethyl, 2-dimethylaminoethyl, 3-methylbutyl, 2-methylbutyl, (S)-2-methylbutyl, 3-aminopropyl, 2-hexyl, and 4-aminobutyl; and

(iii) cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, oxalan-2-yl, 2-(2R)-bicyclo[2.2.1]-heptyl, oxetan-3-yl, azetidin-1-yl, azetidin-2-yl, azetidin-3-yl, and 1-piperidinyl;

A is selected from the group consisting of a bond, CH₂, CH₂CH₂ and CH₂CH₂CH₂;

Ja is C-X⁰;

Jb is C-R¹;

X⁰ is selected from the group consisting of hydrido, hydroxy, hydroxymethyl, amino, aminomethyl, cyano, methyl, trifluoromethyl, and fluoro;

R¹ is selected from the group consisting of hydrido, hydroxy, hydroxymethyl, amino, aminomethyl, cyano, methyl, trifluoromethyl, and fluoro;

R² is selected from the group consisting of 3-amidocarbonyl-5-aminophenyl, 3-amino-5-(N-benzylamidocarbonyl)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(3-fluorobenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(2-trifluoromethylbenzyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-(1-methyl-1-phenylethyl)amidocarbonyl)phenyl, 3-amino-5-(N-benzylamidosulfonyl)phenyl, 3-amino-5-(N-(2-chlorobenzyl)amidosulfonyl)phenyl, 3-amino-5-(N-ethylamidocarbonyl)phenyl, 3-amino-5-(N-isopropylamidocarbonyl)phenyl, 3-amino-5-(N-propylamidocarbonyl)phenyl, 3-amino-5-(N-isobutylamidocarbonyl)phenyl, 3-amino-5-(N-(2-butyl)amidocarbonyl)phenyl, 3-amino-5-(N-cyclobutylamidocarbonyl)phenyl, 3-amino-5-(N-

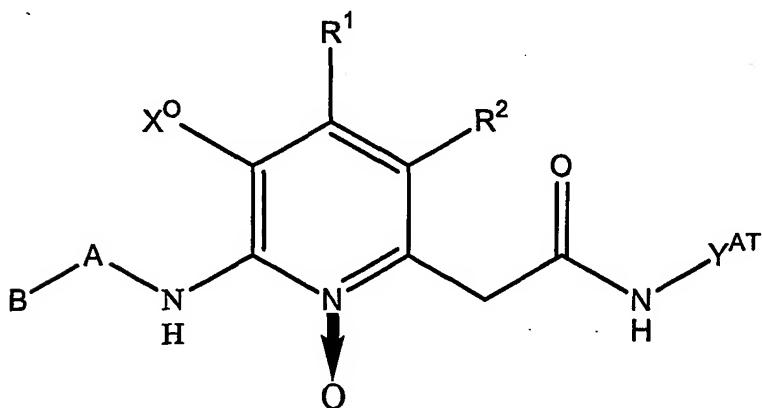
cyclopentylamidocarbonyl)phenyl, 3-amino-5-(N-cyclohexylamidocarbonyl)phenyl, 3-aminophenyl, 3-carboxy-5-aminophenyl, 3-chlorophenyl, 3,5-diaminophenyl, 3-dimethylaminophenyl, 3-hydroxyphenyl, 3-methanesulfonylaminophenyl, 3-methylaminophenyl, 2-methylphenyl, 3-methylphenyl, phenyl, 3-trifluoroacetamidophenyl, 3-bromo-2-thienyl, 2-thienyl, and 3-thienyl;

5

Y^{AT} is selected from the group consisting of 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, 5-guanidino-1-oxo-1-(4-thiazolyl)-2-pentyl, 5-guanidino-1-oxo-1-(5-thiazolyl)-2-pentyl, 5-guanidino-1-oxo-1-(4-amino-2-thiazolyl)-2-pentyl, and 5-guanidino-1-oxo-1-phenyl-2-pentyl.

10

15 102. The compound of claim 98 wherein the compound is selected from the group consisting of:



or a pharmaceutically acceptable salt thereof, wherein;

20 R^2 is 3-aminophenyl, B is phenyl, A is CH_2CH_2 , Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, R^1 is aminomethyl, and X^o is chloro;

R^2 is 3,5-diaminophenyl, B is phenyl, A is CH_2CH_2 , Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, R^1 is aminomethyl, and X^o is chloro;

25 R^2 is 3-carboxy-5-aminophenyl, B is phenyl, A is CH_2CH_2 , Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl,

R¹ is aminomethyl, and X° is chloro;

R² is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is phenyl, A is CH₂CH₂, Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, R¹ is aminomethyl, and X° is chloro;

5 R² is 3,5-diaminophenyl, B is isopropyl, A is single bond, Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, R¹ is aminomethyl, and X° is chloro;

10 R² is 3-carboxy-5-aminophenyl, B is isopropyl, A is single bond, Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, R¹ is aminomethyl, and X° is chloro;

R² is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is isopropyl, A is single bond, Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, R¹ is aminomethyl, and X° is chloro;

15 R² is 3,5-diaminophenyl, B is cyclobutyl, A is single bond, Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, R¹ is aminomethyl, and X° is chloro;

20 R² is 3-carboxy-5-aminophenyl, B is cyclobutyl, A is single bond, Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, R¹ is aminomethyl, and X° is chloro;

R² is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is cyclobutyl, A is single bond, Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, R¹ is aminomethyl, and X° is chloro;

25 R² is 3-aminophenyl, B is phenyl, A is CH₂CH₂, Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, R¹ is chloro, and X° is hydrido;

30 R² is 3,5-diaminophenyl, B is phenyl, A is CH₂CH₂, Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, R¹ is chloro, and X° is hydrido;

R² is 3-carboxy-5-aminophenyl, B is phenyl, A is CH₂CH₂, Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, R¹ is chloro, and X° is hydrido;

35 R² is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is phenyl, A is CH₂CH₂, Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, R¹ is chloro, and X° is hydrido;

R² is 3,5-diaminophenyl, B is isopropyl, A is single bond, Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, R¹ is chloro, and X° is hydrido;

5 R² is 3-carboxy-5-aminophenyl, B is isopropyl, A is single bond, Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, R¹ is chloro, and X° is hydrido;

R² is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is isopropyl, A is single bond, Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, R¹ is chloro, and X° is hydrido;

10

R² is 3,5-diaminophenyl, B is cyclobutyl, A is single bond, Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, R¹ is chloro, and X° is hydrido;

15

R² is 3-carboxy-5-aminophenyl, B is cyclobutyl, A is single bond, Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, R¹ is chloro, and X° is hydrido;

R² is 3-amino-5-(N-benzylamidocarbonyl)phenyl, B is cyclobutyl, A is single bond, Y^{AT} is 5-guanidino-1-oxo-1-(2-thiazolyl)-2-pentyl, R¹ is chloro, and X° is hydrido.

20

103. A composition for inhibiting thrombotic conditions in blood comprising a compound of each of claims 2, 3, 12, 66, 73, 81, 89, 97, or 102 and a pharmaceutically acceptable carrier.

25

104. A method for inhibiting thrombotic conditions in blood comprising adding to blood a therapeutically effective amount of the composition of claim 103.

30

105. A method for inhibiting formation of blood platelet aggregates in blood comprising adding to blood a therapeutically effective amount of the composition of claim 103.

106. A method for inhibiting thrombus formation in blood comprising adding to blood a therapeutically

effective amount of the composition of claim 103.

107. A method for treating or preventing venous thromboembolism and pulmonary embolism in a mammal comprising administering to the mammal a therapeutically effective amount of the composition of claim 103.

108. A method for treating or preventing deep vein thrombosis in a mammal comprising administering to the mammal a therapeutically effective amount of the composition of claim 103.

109. A method for treating or preventing cardiogenic thromboembolism in a mammal comprising administering to the mammal a therapeutically effective amount of the composition of claim 103.

110. A method for treating or preventing thromboembolic stroke in humans and other mammals comprising administering to the mammal a therapeutically effective amount of the composition of claim 103.

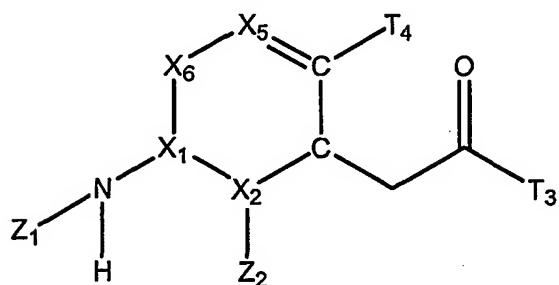
111. A method for treating or preventing thrombosis associated with cancer and cancer chemotherapy in humans and other mammals comprising administering to the mammal a therapeutically effective amount of the composition of claim 103.

112. A method for treating or preventing unstable angina in humans and other mammals comprising administering to the mammal a therapeutically effective amount of the composition of claim 103.

113. A method for inhibiting thrombus formation in blood comprising adding to blood a therapeutically effective amount of a compound of each of claims 2, 3,

12, 66, 73, 81, 89, 97, or 102 with a therapeutically effective amount of fibrinogen receptor antagonist.

114. A compound having the structure:



5 wherein

X₁, X₂, X₅, and X₆ are members of a heterocyclic or aromatic core ring,

X₁ and X₂ are independently carbon or nitrogen,

10 X₅ and X₆ are independently carbon, nitrogen, oxygen or sulfur, provided when X₅ is carbon it is -CH=, -C(F)= or

-C(Br)=;

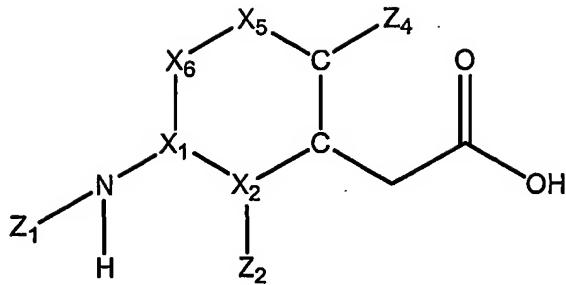
T₃ is hydroxy, alkoxy, substituted alkoxy, or substituted amino;

15 T₄ is -Cl, -Br, -I, -S(CH₃)₂, or -OSO₂(CF₃);

Z₁ is hydrocarbyl, or substituted hydrocarbyl; and

Z₂ is a hydrogen bond acceptor covalently or datively bonded to X₂.

115. A compound having the structure:



wherein

X_1 , X_2 , X_5 , and X_6 are members of a heterocyclic or aromatic core ring,

X_1 and X_2 are independently carbon or nitrogen,

5 X_5 and X_6 are independently carbon, nitrogen, oxygen or sulfur, provided when X_5 is carbon it is $-CH=$, $-C(F)=$ or

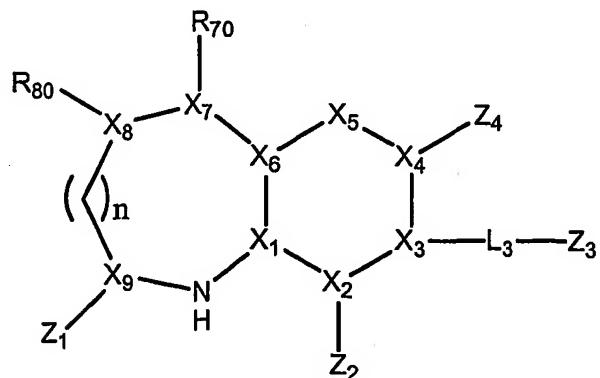
$-C(Br)=$;

10 Z_4 comprises hydrocarbyl, substituted hydrocarbyl or a 5 or 6 membered heterocyclic or carbocyclic ring, the ring atoms of the 5 or 6 membered heterocyclic or carboxylic ring of Z_4 being carbon, nitrogen, oxygen, or sulfur;

Z_1 is hydrocarbyl, or substituted hydrocarbyl; and

15 Z_2 is a hydrogen bond acceptor covalently or datively bonded to X_2 .

116. A compound having the structure:



Wherein

Z_1 , Z_2 , Z_3 , Z_4 , L_3 , X_1 , X_2 , X_3 , X_4 , and X_5 are as defined in claim 1;

X_6 is independently carbon or nitrogen;

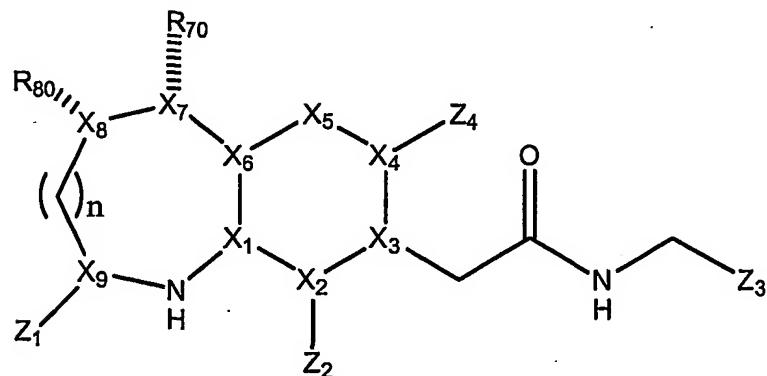
5 X_7 and X_8 are independently a covalent bond, carbon, nitrogen, oxygen or sulfur;

X_9 is carbon substituted with a methylene group or carbon substituted with an ethylene group wherein said methylene or ethylene group covalently links X_9 and Z_1 ;

10 n is 0 to 2; and

R_{70} and R_{80} are independently selected from the group consisting of hydrogen, halogen, amino, hydrocarbyl, substituted hydrocarbyl, aryl, wherein aryl is phenyl either unsubstituted or substituted with hydroxy, amino, C1-C6 alkyl, C3-C8 cycloalkyl, or halogen provided that R_{70} is not present when X_7 is a bond and R_{80} is not present when X_8 is a bond; or R_{70} and R_{80} , along with the ring atoms to which each is attached, form a 5 or 6 membered saturated ring.

20 117. A compound having the structure:



wherein

Z_1 , Z_2 , Z_3 , Z_4 , X_1 , X_2 , X_3 , X_4 , and X_5 are as defined in claim 1;

X_6 is independently carbon or nitrogen;

25 X_7 and X_8 are independently a covalent bond, carbon, nitrogen, oxygen or sulfur;

X₉ is carbon substituted with a methylene group or carbon substituted with an ethylene group wherein said methylene or ethylene group covalently links X₉ and Z₁; n is 0 to 2; and

5 R₇₀ and R₈₀ are independently selected from the group consisting of hydrogen, halogen, amino, hydrocarbyl, substituted hydrocarbyl, aryl, wherein aryl is phenyl either unsubstituted or substituted with hydroxy, amino, C1-C6 alkyl, C3-C8 cycloalkyl, or halogen provided that R₇₀ is not present when X₇ is a bond and R₈₀ is not present
10 when X₈ is a bond; or R₇₀ and R₈₀, along with the ring atoms to which each is attached, form a 5 or 6 membered saturated ring.